OVERALL SUMMARY

S.1 Aims of this study

This study is concerned with value for money in connection with the care of elderly people by local authority social services departments. It has as its aims:

- to identify factors underlying differences in the patterns of care provided to elderly people by social services departments in different local authorities, and to review the impact these factors have on the costs of care provided and the value for money obtained;
- to investigate elements of the care provided by particular authorities and to identify those whose adoption by other authorities might improve the value for money obtained by those authorities.

The study was carried out by the management consultancy firm of Arthur Andersen & Co. under contract to the Audit Inspectorate on behalf of the District Audit Service.

S.2 The Summary

This overall summary presents conclusions that emerge from the study as a whole; it also presents a summary of detailed conclusions and the approach and arguments leading to them.

The summary should be regarded as an integral part of the report; it should be noted that while the chapters of the report present and qualify the detailed arguments leading to the conclusions, the chapters do not always repeat all the conclusions which appear in the summary.

The provision of services to the elderly is a complex subject, and the analysis necessary to achieve useful understanding of the subject is correspondingly complex. To pursue this understanding is an ambitious task. But the fact that there are very large differences between different authorities - both in expenditure and in services provided - makes the task important to undertake. Furthermore, in the study team's opinion, a fairly large measure of success in the task has to be achieved if a framework is to be provided in which there can be well focussed and rational debate on the reasons for the differences, and what should be done about them. This means that the study team has had to be ambitious.

The ambitiousness of the task is illustrated by the fact that the study team has had to introduce some innovations in the analysis. Furthermore, the task could easily have been frustrated by deficiencies in data; to overcome this problem the study team has had to group data in ways that may be unfamiliar, and has had to ensure that the general thrust of the conclusions is not unduly sensitive to assumptions that have had to be made. These factors combine to make some of the arguments of the report quite complex; unfortunately this may well create difficulties for readers of the report in assimilating the arguments and reviewing the validity of the conclusions.

However, to help the reader, this summary is presented at the beginning of the report to give an overall sense of direction when considering the detailed chapters.

S.3 The approach

It is recognised that more money - appropriately spent - can always improve the standards of care offered to a particular elderly person. So how is it right or useful to talk about the value for money of the services offered by a local authority in connection with the elderly? One cannot pretend to say how much an increase in the standard of care to an individual is worth - to him, or to anyone else. The present study does not address philosophical issues such as this, nor how much is the life - or the quality of life - of an elderly person worth, nor what is the value for money balance between the interests of an elderly person and those of his relatives.

Rather, it is hoped that this study can lead to the development of a coherent framework for a local authority to use when it assesses its provision of its various services to various different categories of the elderly. It is not supposed that the purpose of such an assessment is, primarily, to reduce expenditure. The purpose of the assessment is more to find whether there are directions in which, say, the current level of social services department expenditure (around £650 million in 1980/81 in total for all authorities) should be divided between the different social services department activities directed to the elderly so that the expenditure may be more effective in achieving the political aims set for the authority.

Furthermore, the framework for the assessment is meant to assist the auditor and local authorities in their roles for improving value for money in two respects. The first purpose is to assist the auditors to challenge whether an authority's provision is being analysed and presented in ways which facilitate the authority's own process for judging whether, according to its own political views, it is indeed providing value for money. The second purpose is to assist by providing some key reference numbers, to challenge whether the provision is consistent with value for money or whether there are directions for change which appear to offer opportunity for increasing value for money, under any set of political aims.

here the conclusions of the study point to opportunities for change, the onclusions should be regarded as challenges which need consideration by an authority in so far as the arguments and assumptions of the study team are agreed to be valid. While the study team has attempted to ensure that its conclusions are such that they are not affected by small variations in the assumptions, if an authority believes that its particular circumstances are such that the assumptions made are inappropriate or incomplete for the authority, then the challenge to the authority is to support its different assumptions and to show how they affect the conclusions. (To assist authorities to do this, instructions for carrying out the detailed calculations described in this report and its appendices are set out in the 'social services departments value for money scrutiny handbook' which is planned for later publication). The reader should be careful not to regard the conclusions of the report, and particularly the numerical conclusions, as being appropriate to a particular authority until the particular circumstances of the authority have been checked and incorporated in the analysis.

Thus the approach of the study may be seen as providing a step in the development of a tool to promote a dialogue of informed discussion between those responsible for providing services and those responsible for reviewing, challenging and authorising the types and levels of services provided.

The detailed approach of the study was to:

- understand the background to the provision of care to elderly people,
- visit four local authorities to understand their different approaches to the provision of care and obtain information about this provision, obtaining both quantitative information previously held by the authorities and information from surveys specially mounted for this study,
- unravel some of the complexity which makes it difficult to clarify value for money issues in care of the elderly,
- present findings from the study,
- suggest conclusions.

The authorities were visited in July to December 1981. A short report profiling the resources and services provided by each authority visited, together with preliminary results of some of the analyses performed on the data collected, was prepared for each authority and discussed with officers of the social services departments concerned as a basis for this report. A copy of the relevant section or sections of each of these reports was also provided where appropriate to the authority's housing department or the relevant local health authority for review and comments.

S.4 Characteristics of the authorities visited

The four authorities included:

- two inner London Boroughs,
- two metropolitan boroughs.

The authorities were selected to cover a wide range of different approaches to care for elderly people, and of patterns of expenditure on the different types of service for them.

Throughout this report the authorities are referred to by the labels 'A', 'B', 'C', 'D'; (these labels are not the same as those used in previous reports by Arthur Andersen & Co. for the Audit Inspectorate on mental handicap and child care).

In the view of the study team, the method of analysis and the nature of the conclusions need eventually to be confirmed or modified after the study can be extended to cover authorities with an even greater variety of practices. This report is based almost entirely on what was observed in the four authorities. Thus elements of service which are very important for some authorities - such as 'very sheltered housing', National Health Service (NHS) nursing homes - are not considered in the report because they were not significant features in the four authorities. Any subsequent extensions of this study should repair these gaps, just as they should also cover authorities which have data available on the characteristics of people actually using the facilities provided and, of course, shire counties.

S.5 The elderly

Elderly people, that is people aged 65 or more, constitute about 15% of the population; their numbers are growing.

The range of disabilities and needs within the elderly as a group is very wide; very approximately:

- 2% cannot perform the most basic tasks without assistance,
- 3% cannot perform most important household or personal tasks but have some mobility,
- 10% cannot perform a number of important household or personal tasks and have difficulty in leaving their homes unassisted,
- 35% cannot perform heavy household cleaning,
- 50% can live satisfactorily without support by others,
- 6% (in addition to one or other of the above) suffer behaviour disorders and/or dementia.

Dependency has been classified in this study as follows:

Table S.1 - Classification of dependency for the elderly

Elderly group	Physical dependency
Highly dependent	Severe - bed-bound or chair-bound or Moderate - not bed-bound or chair-bound but unable to perform some personal tasks without help
Less dependent	Minor - able to perform personal tasks (except, in some cases, washing all over) but unable to perform some household tasks or None - able to perform household tasks (except, in some cases, heavy cleaning)

This classification is similar to that adopted in the DHSS study of "Community Care" (Ref. 1).

S.6 Dimensions of value

Services to the elderly have to be matched to the different needs of sub-groups within the elderly, the sub-groups differing in their characteristics of disability and also of environment.

The contributions of the various services to the elderly to satisfying the different needs of the different sub-groups are described in this study by the extent to which the services achieve improvement along the following dimensions relevant to an elderly person himself:

- physiological-
    - personal care (cleanliness of person, bodily functions),
    - nutrition (ability to provide balanced diet),
    - environment (cleanliness of home, ability to move out of home).
- security-
    - risk of adverse change in circumstances being undetected.
- connectability-
    - ability to be 'connected' with his community.

The three groups of dimensions are in a natural hierarchy in the sense that achievement along the physiological dimensions has at least to be adequate before 'security' and 'connectability' affect value; likewise, 'physiological' and 'security' have to be adequate before 'connectability' operates (Ref. 2).

Services also contribute to achievement of-

- support to friends and relatives who may themselves be willing to support the elderly person,
- freedom from unreasonable annoyance to society at large (from those with behaviour disorders).

S.7 The provision of care to the elderly and the variation of social services department care between authorities

Local authority social services departments spend much more on the elderly than on any other client group; they spend rather more than the NHS spends directly on the elderly, but on very many more clients; they spend very much more than is spent by private and voluntary agencies.

Social services departments (SSD) vary nationally in their expenditure on the elderly by about ± 37% per elderly person. For an authority with a typical population of, say, half a million and an elderly population of 75,000, the variation is equivalent to about ± £2 million per annum.

The variation in expenditure per person over 75 is approximately ± 42%. Of this variation, only about ± 11% is explained by variations in cost per unit of provision and in demography.

Of the total direct net expenditure by SSDs on the elderly, approximately half is on residential accommodation, one third is on home helps, and 4% or less is on each of day centres and clubs, meals-on-wheels, sheltered housing, and a group of various services including, for example, telephones, holidays, aids and adaptations to the homes of elderly people.

In the four authorities visited, the ranges of provision of the main services per thousand elderly persons aged 65 or over (/1000) were:

- 6 to 10 long stay hospital places,
- 15 to 31 residential places,
- 4 to 15 full time equivalent home helps,
- 2 to 4 day centre places,
- 64 to 459 meals per week.

The costs per person of the different modes of care (hospital, residential or community) are very different; very approximately, a place in hospital costs the NHS three times as much the cost to a local authority of a place in a residential home; a place in a residential home usually costs a local authority more - and often much more - than care in the community; however, the very intensive package of domiciliary care which may be required by the most dependent elderly who can live in the community may cost as much as a residential place (or, in extreme cases, somewhat more).

S.8 Clarification of value for money issues

The issues involved in the value for money of services to the elderly are particularly complex - and the complications cannot be ignored in the analysis.

The following complexities - inherent in study of the value for money of care of the elderly - determine the form of any value for money insights, and limit how far they can go:

- an absence of of achievement measures (especially on a ratio scale);

- an absence of objective measures of value;

- differences in the way alternative forms of care for a particular sub-group enhance different dimensions of value for the members of the sub-group (for example, residential care may give security but at the expense of connection with the community, while domiciliary care may not be able to achieve adequate security), and the absence of an accepted philosophy of care which indicates which alternatives are preferable for a sub-group;

- absence of professional agreement on the appropriate types and levels of resource which are required to obtain some types of achievement (for example, the extent to which various forms of domiciliary care, such as the provision of home help or meals, may inhibit the rate of deterioration of old people);

- conflicts between what may be best to do for a particular elderly individual and, for example, what may be best for his friends or relatives, or for the smooth running of a residential home for which he may be a candidate;

- the definition of the net costs of each mode of care is complicated by issues such as: change in social security benefits and allowances depending on mode; which body bears the capital costs of wherever an elderly person is living, and how this changes when mode of care changes; the size of financial contribution by the elderly person allowing for his financial circumstances.

Furthermore, while the difficulty is not inherent, an important limitation on what can be done in studying value for money arises in practice from deficiencies in information on the number of the elderly with particular characteristics in each authority, in the population as a whole, and in each care setting.

The method of analysis which is used in the study has to negotiate a path around the complexities to arrive at value for money conclusions. The method is outlined step by step in the chapters; its overall logic is described in Appendix 1 which also contains a diagramatic representation of the problem which has to be addressed. This diagramatic representation may be useful to analysts and designers of the better information systems which the team believes are necessary to support improved planning and control of the use of resources for the elderly.

The method produces a reference framework for comparison with the position in an authority; this framework consists of a range of estimates of the necessary provision of hospital beds and of residential places based on assumptions made explicit in the report, and then, in the context of this provision, community services are analysed.

When analysing the provision and allocation of resources in a particular authority, residential provision is analysed in the context of actual hospital provision, and then community services are analysed in the context of actual hospital and residential provision. The analysis is done from the perspective of the social services department and does not attempt to take account of matters such as changes in an individual's financial benefits and charges.

Underlying the method are two key observations:

- there is a pronounced cost hierarchy between the three broad categories of care - hospital, residential or intensive domiciliary, and less intensive domiciliary. This hierarchy enables problems of provision and allocation of resources to be considered for each successively less expensive category in turn after taking account of the provision of the more expensive categories;

- it is relatively easy to identify for most sub-groups of the elderly whether a particular category of care can achieve an adequate level for each sub-group along each of the main dimensions along which the value of care has to be assessed. This enables the least expensive 'adequate' mode of care for a sub-group along one particular dimension of value to be identified.

S.9 Value for money questions of importance to a local authority and to its auditors

The study cannot address questions of the relative value of service to different sub-groups - this is a matter for local policy. The study cannot, therefore, address questions of the overall value of the total expenditure by an SSD on the elderly. The study aims rather to present for consideration possible directions for improvement of value for money of a particular service or package of services to a particular sub-group.

It will perhaps be helpful to the reader to note here that the discussion makes frequent use of the expression "consistent with value for money". This is intended to reflect the fact that, since the study team do not have a scale of value - and indeed do not believe that it would be appropriate for them to have one - it is not generally appropriate for the study team to say that a particular activity "gives value for money". On the other hand, the study team can sometimes say that a particular type or level of care directed to a group of elderly people gives more value for money than an alternative form or level of care devoted to the same group, and that the care is therefore "consistent with value for money" - in the sense that if it did not give more value for money than the alternative, then the care would not be consistent with value for money.

There are only a limited number of cases where the study team is able to say that one activity gives more value for money than another. These cases occur when one activity produces more (or no less) achievement than another along one dimension of the service offered to a particular group of the elderly, and when the first activity costs less than the second. In such cases it is valid to say that the first activity produces more value for money than the second whatever may be the political view of the 'value' of the achievement or the professional view as to its size. Likewise, if achievement along one dimension of the problem to at least an adequate level takes priority over achievement along a second dimension, then use of the phrase "consistent with value for money" is governed by the first dimension.

It should be noted that sometimes the phrase "consistent with value for money" has to be qualified when, for example, a policy may be consistent with value for money in respect of the elderly themselves but may impose a burden on some other group such as friends or relatives.

However, there are certain important cases when the study team is able to use the phrase "gives value for money". These are the cases when no cheaper type of care exists which can truly be considered a viable alternative for a particular group, and where it can be assumed that the value provided is worthwhile almost regardless of cost e.g. hospital care for those who cannot really be cared for in any other way.

The following list of broad questions is addressed subsequently in the context of the four authorities. The questions relate to the value for money of care delivered at present to the elderly; it is expected that they should generally be of concern to a local authority and its auditors:

1. Is the use of hospital beds by the elderly from the area covered by a local authority consistent with value for money?

2. Is the availability of residential places provided by a local authority consistent with value for money?

3. Is the allocation to individuals of the residential places provided consistent with value for money?

4. Is the provision of home helps consistent with value for money?

5. Is the provision of day care consistent with value for money?

6. Is the provision of meals consistent with value for money?

7. Is the provision of sheltered housing consistent with value for money?

8. Are the total expenditures on community services consistent with value for money?

9. Is the co-ordination of services consistent with value for money?

10. What are the main sources of differences in expenditure between the four authorities?

The analysis in the study answers these questions on the basis of broad, explicit assumptions about what would be judged by professionals to be the best forms of care for elderly people with a specific combination of disability characteristics but it does not allow for the possibility that people might themselves choose some different form of care if they were free to choose. Of critical importance to the study is the fact that the answers are also based on explicit assumptions - derived from survey data elsewhere - about how many elderly people with specific types of disability are likely to be in the area served by a local authority. The questions are addressed to the extent which appears to be possible without having to make assumptions on essentially local policy matters of how much a local authority judges it is worth spending to achieve specific levels of care.

The answers are summarised in the next section. They are presented with the aim of enabling a local authority

- to compare its own position and to consider any differences with respect to the views of its own professionals on what - on balance - are the most appropriate forms of care, and

- to evaluate its own position in the light of its own policies on value for money.

Where significant differences emerge between the answers in this study and the actual provision or allocation of resources by an authority, and it is thought that these differences occur because the authority judges that insufficient allowances for local circumstances have been made in the study team's assumptions about

- the prevalence of specific combinations of disability either in the authority's particular care settings or in its population as a whole, and/or

- the extent of availability of support by friends or relatives in the particular environment of the authority

then the authority may wish to confirm or modify the assumptions by carrying out surveys of prevalence. These surveys should cover first, and more easily, those to whom it is delivering care, and secondly, if necessary, its elderly population as a whole.

An overview of the answers to the questions indicates that the total provision of hospital and residential care in the country and in the four authorities is approximately consistent with value for money, but the allocation of the resource to individuals may well not be consistent with value for money i.e. some people are being provided with care which is more expensive than they need and which may indeed be giving them less value than they would receive from the cheaper form of care, while others may not be receiving the expensive form of care which they require.

On the other hand, the total expenditure on community care varies widely. The lowest expenditure observed in the four authorities is estimated to be close to the level which an authority is obliged to spend if obviously unacceptable gaps in care are to be avoided - i.e. any reduction in expenditure would be expected to bring about a disproportionate loss in value. The additional community expenditure which is observed in the higher spending authorities is doubtless giving value; it is for local policy makers to decide in the light of their political aims whether the additional value is worth the additional money.

S.10 Results and conclusions

Question 1 - Is the use of hospital beds by the elderly from the area covered by a local authority consistent with value for money?

The implied DHSS guideline (see note below) for the provision of long-stay hospital beds for elderly people (appendix 5), and the estimated NHS average national provision is 10 beds/1000 elderly. This number is inside the reference bracket (9½-13½ beds/1000) estimated by the study team for the provision required to give value for money. All of the four authorities have available to their populations a provision which is less than 10 beds/1000 and one authority has substantially less than the lower end of the study team's estimated range.

The provision of additional residential or domiciliary care in those authorities which are subject to a NHS shortfall from the reference bracket incurs an additional cost burden on the authorities (but which is less than the NHS saving). However, it is unlikely to provide the same achievement of physiological and security standards for those elderly who are severely disabled and either have no supporting friends or relatives, or have complicating factors such as severe incontinence or dementia. Provision of the extra value of hospital care to those who would probably be better off in hospital would cost the public sector an additional net annual expenditure of about £20,000/1000 in the area of the authority whose provision is substantially less than the lower end of the framework range. Translated into the terms of the area of an authority of half a million population with an elderly population of 75,000, with similar under-provision, the cost would be about £1,500,000 annually.

Any value for money problem due to shortfall in provision of NHS beds is made worse to the extent that beds are allocated to those with moderate or minor disability rather than severe disability. There is some evidence this may be happening, in which case the procedures and information base for controlling the allocation of beds needs review.

Consideration of the value for money of hospital beds is made uncertain by the study team's inability to find an accepted view on the appropriate care for elderly people with behaviour disorders but with some mobility.

Note:

The DHSS has now ceased the practice of issuing or implying guidelines for the provision of NHS resources.; this study does not use those guidelines that were previously published or implied, but does compare its conclusions with the guidelines throughout the report as a matter of interest - especially since the previous guidelines may have affected what is now actually provided.

Question 2 - Is the availability of residential places provided by a local authority consistent with value for money?

For some groups of the elderly, residential homes are the only practical way of adequately achieving basic physiological and security requirements other than in more expensive hospital beds. For other groups, a spectrum of domiciliary care at various intensities will satisfy the same requirements at an acceptable level, and will, in addition, satisfy the 'connectability' requirements which may be difficult to achieve in residential homes. The residential care costs less than the most intensive packages of domiciliary care but more than most packages of domiciliary care. The question relating to residential provision has therefore been answered in the context of the actual NHS provision available to an authority, and in the context of providing residential care only to the basic minimum number of people who require it and for whom domiciliary care would not be cost effective.

(The extent to which the provision of alternatives to residential care - e.g. "very sheltered housing" incorporating enhanced welfare and care facilities - might provide increased value for money is not covered in this report since none of the authorities visited provided such accommodation. This matter is, however, an issue of importance and requires coverage in any further work).

The study team estimates that, in the context of average NHS provision, a residential provision of some number between 17/1000 (the 1980-81 national average) and 21/1000 accords with its reasoned view on a level of provision which is consistent with value for money. Hence the DHSS guideline implied for 1983 of 25/1000 (published in 1973) appears high unless local policy gives exceptional weight to the value of relieving friends and relatives of the work of caring, or places exceptional weight on the value of achieving physiological and security standards as compared to 'connectability'.

The provision in two of the four authorities is consistent with value for money, in the context of their actual availability of hospital beds, and based on the study team's assumptions on what is needed by each group and also on group sizes as modified for age structure and proportion of elderly living alone in each authority.

In the third authority, the provision appears to be at least 15% high. If this additional provision were eliminated, the authority could make savings of the order of £7,000/1000, - i.e. £500,000 for a typical size authority - and improve the connectability of those who would be kept in the community. (This authority is in fact in the process of reducing the provision of its own residential accommodation and its usage of the private and voluntary sector. In the interests of achieving value for money, the timing and impetus of such a change is of course critical; an authority in such a position has to consider whether it is achieving such a reduction as quickly as is practical bearing in mind the continuing needs of clients and the interests of staff.)

In the fourth authority, the provision relative to the study team's assumptions appears to be up to 20% low. It is worth considering the implication of too low a provision (although in the particular social circumstances of this authority it may be that the provision is in fact appropriate):

- the extra money that would be required to overcome such a shortfall would be in excess of £100,000 in an authority of half a million, after recognising the reduction in requirement for intensive domiciliary care;

- the extra value to set against this expenditure would be either

  (a) an increased security for individuals who have little or no support from friends or relatives and who suffer either moderate physical disability or minor disability with complications of dementia or incontinence, or

  (b) improved physiological care and security, and lessening of the burden on friends and relatives for the few with severe disability or behaviour disorder who might otherwise have to be in the community;

- against this extra value has to be set the loss in value due to reduction in connectability of those moved into residential homes.

(A simplified method of performing an initial comparison of an authority's provision of residential accommodation with the reference bracket consistent with value for money is set out in appendix 10).

Question 3 - Is the allocation to individuals of the residential places provided consistent with value for money?

Information concerning the characteristics of people in local authority residential homes is not generally available and so this important question cannot be answered with confidence. Survey information available at two of the four authorities suggested, however, that a smaller proportion of residents are highly dependent (particularly in respect of the moderately disabled) than might have been expected on the basis of the study team's reference framework.

On the basis of the reference framework, it follows that up to about half of the moderately disabled whose circumstances merit them being in a residential home are not, in fact, in a residential home. They must be suffering a shortfall in value, particularly in their security, although they can enjoy the greater connectability which may be possible through remaining in their own homes and may indeed be in their own homes through choice. The shortfall in value arises even though they either incur a heavy demand on the domiciliary services, possibly to the extent of costing more than if they were in a residential home, or they place a heavy burden on friends and relatives.

Likewise, it follows that a number of the less dependent are allocated to residential homes, even though they could be supported so that they could enjoy the benefits of living in the community. They incur more cost than the relatively low cost of the domiciliary care that would keep them in the community.

The value for money consequences of any misallocation are important, and the possibility seems real that such misallocation could occur either because of

- pressures from the residential homes themselves to maintain a mix of people which does not contain too many whose needs for care are relatively difficult to satisfy with the facilities available, or

- shortcomings in communication between residential management and community services management, which may lead to the community services management not always being informed about applicants for residential places who are less dependent and who should be candidates for community care.

Authorities may therefore wish to consider:

- improving their control of allocations by improving the information available to them centrally on the numbers of people in their residential homes with various disability characteristics,

- reviewing procedures for focusing community care on potential candidates for residential care,

- improving the specification of criteria relating admissions to disability characteristics,

- improving the standard of residential home facilities so that the highly dependent can be more easily cared for.

In terms of expenditure on residential care in local authorities' own homes, the gross costs/resident week varied by approximately ± 20% and net costs by ± 30% between the four authorities. By far the largest part of the differences was accounted for by higher costs in the London authorities. A detailed analysis of the differences was not performed in this study; thus no comment can be made on differences in efficiency in residential homes.

Question 4 - Is the provision of home helps consistent with value for money?

The study team found that the ± 50% range in the amount of home help provided to the elderly in the four authorities is still as much as ± 45% after allowing for the differences in hospital and residential provision, and for differences in the age structure. There are therefore wide differences either in the policy aims of providing home helps, or in the effectiveness of pursuing such aims, or in both.

The differences were analysed for two groups of the elderly in the community (and not in hospital or in residential homes). The first group comprised those with severe or moderate physical disability and those with minor physical disability but classified as without support from friends or relatives. This group is referred to as the 'high public sector dependency' group. The second group comprises those with minor physical disability but supported by friends or relatives, and those with no specific disability - the 'low public sector dependency' group. (The analysis was done with these highly aggregated groups rather than finer groups so as to ensure that any conclusions were not unduly sensitive to assumptions about the characteristics of the elderly in hospital and in residential homes.)

The proportions of these groups who were covered by home helps in the four authorities were found from surveys conducted for the study to be very different.

Two authorities were found to provide home help to 85% or more of the 'high public sector dependency' group. The other two authorites appeared to cover only 30% or less of this group with local authority home helps. However, it is assumed by the study team that the majority of members of this group require substantial help from the public sector if their levels of achievement along the physiological dimensions are to be adequate and if they are to be maintained in the community. Hence it follows that whether provision for high or low coverage of the 'high public sector dependency' group is adequate and is consistent with value for money has to be considered in the context of co-ordination of home help with other services. This important subject of co-ordination is discussed under the heading of Question 9.

Three authorities were found to provide home help to about 8% of the relatively large number of people in the 'low public sector dependency' group. The authority whose total provision of home help was the lowest observed of the four authorities provided home help to only about 3%.

However, the socio-economic characteristics of this fourth authority are such that it is likely that a relatively large number of people pay for private sector home help; making an allowance for this based on differences between parts of the same authority suggests that about 4% of its 'low public sector dependency' group are covered by private or public sector home help.

What do these differences in coverage of the 'low public sector dependency' group indicate about value for money? First, it should be noted that the differences are substantial; two authorities were spending about 20% of their home help budget on providing the additional 4% cover and the third authority appeared to be spending about 40% of its home help budget on the additional cover.

Second, the argument in the report suggests that the first 4% of cover is sufficient in at least one authority to stop members of the 'low public sector dependency' group moving into the 'high public sector dependency' group because, without this cover, some friends and relatives would cease to be prepared to support people in the 'less dependency' category. This suggests that providing home help to 4% of the 'low public sector dependency' group can be consistent with value for money, even recognising that different views are taken of improving the quality of life of the elderly or of their friends and relatives.

Third, the additional value of covering a further 4% of the 'low public sector dependency' group is worth the additional expenditure in the three observed authorities of 20% to 40% of their total home help budgets (i.e. an expenditure of about £500,000 per annum for an authority with a 500,000 population) depending on local policy judgements of -

- the value of improving the quality of life for the elderly above the level achieved in the low coverage authority;

- the value of reducing the burden of care that would otherwise be assumed by friends or relatives.

The value for money of this further 4% of coverage is also dependent on the validity of the view of professionals in one of the authorities that their high level of home help provision inhibits the rate of deterioration of the elderly.

In three authorities - where the study team was able to analyse data - economy and efficiency in the provision of home help differed significantly.

The cost of employing home helps and organisers differed by 30% between the authorities. Most of the difference was associated with higher London costs, the difference in costs being more marked for the organisers than for the home helps. These differences in economy accounted for 70% of the differences in gross cost per contact hour.

Efficiency (the number of organisers or home helps per contact hour) differed by 10% between the four authorities. The ratio of organisers to home helps was larger in the two authorities for which good co-ordination of resources appears to be necessary to achieve adequate coverage by domiciliary services. In addition, 10% of available time was spent in travelling time in the London authority as compared to the two metropolitan authorities where travelling time is very small. (One metropolitan authority provides home helps in relatively small patches - incurring also the burden of relatively more organisers. The other metropolitan authority provides relatively few home help visits of short duration). The study team concludes that it is difficult to isolate efficiency from the perhaps more important issues of co-ordination.

Policies on charging for home help vary from making no charge in the authority with the highest home help coverage, to a variety of means-tested or flat charges in the other authorities. (Calculations performed by the authority which does not charge for home help showed that the income which might be received from means-tested charges would be approximately the same as the costs incurred in employing staff to administer the charging policy).

Question 5 - Is the provision of day care consistent with value for money?

The reference framework argument leads to the view that the level of provision of day care with transport is determined entirely by the role that day care is required to play as part of a co-ordinated package of care. The actual provision in the four authorities is approximately consistent with DHSS guidelines.

The proportions of day care recipients who visited day centres four or five times a week varied between 2% and 20% in the three authorities for which data was analysed. There was considerable variation in the types of facilities provided by the four authorities. These variations lead the study team to conclude that some of the authorities need to question whether their objectives in providing day care are sufficiently well defined.

The efficiency of providing day care is affected by the costs of transporting clients to and from the centres. The percentage of the cost allocated to transport in the four authorities varies between 25% and 75%. To understand these variations would require a special study of the cost allocation in the authorities. However, the study team observed the following means of reducing transport costs:

- using day centre transport to take people to and from lunch clubs,
- employing drivers to work in the day centres during the middle of the day,
- using taxi services at peak times,
- sharing transport with other departments.

Whether the provision of day care without transport, offered by some authorities to the relatively able-bodied, is consistent with value for money is a matter for local judgement. (In one authority the provision of such day care incurred expenditure at a rate equivalent to £750,000 per annum for an authority with a population of half a million).

Question 6 - Is the provision of meals consistent with value for money?

The policies on provision of meals appear quite different in the four authorities. One authority provides approximately three times as many meals as two of the other authorities, and six times as many as the fourth authority (i.e. a ratio of 6:2:2:1). The total net costs incurred are, correspondingly, in the ratio 9:5:1½:1.

The allocation of meals-on-wheels is generally consistent with the differentiation of need as reflected in the allocation of home help. Similarly, the provision of meals is consistent with value for money to the extent that it contributes to the survival of many of the elderly in the community, and through its ability to mobilise the support of friends or relatives for other forms of care.

However, there is some evidence of a lack of control over allocation, not consistent with achieving value for money, particularly in the one authority that depends on voluntary services to distribute the meals. In this authority about 80% of meals-on-wheels go to people who are themselves able to cook main meals but where, on the other hand, the highly dependent tend not to receive meals-on-wheels more than twice a week.

Two-thirds of the range in provision is accounted for by one authority. In that authority, the view of professionals is that a high level of provision of meals and of the socialising possibilities of lunch clubs inhibits the rate of deterioration of the elderly. Whether or not the relatively high rate of provision is indeed consistent with value for money is much affected by whether or not this view is valid. The study team concludes that evidence for the view should be obtained and analysed.

The remainder of the variation in provision is very largely accounted for by another authority which provides a relatively low number of meals per recipient per week. Authorities may wish to consider whether or not this provides an indication of what can be done to mobilise support from friends or relatives or whether this authority is placing too much of a burden on friends and relatives.

The gross cost of providing meals-on-wheels is essentially divided into preparation costs and delivery costs. Each of these costs is higher in the two inner London authorities than in the two metropolitan authorities. The difference in preparation costs is accounted for by higher costs in the London authorities (as for residential care and home help). The difference in delivery costs is more than might be expected to arise from higher costs in London authorities alone and arises from an apparently more efficient method of utilising drivers in one metropolitan authority and from the use of volunteer drivers in the other metropolitan authority. The use of volunteer drivers provides for the lowest gross cost; however, it is associated with a restriction in the flexibility of the meals-on-wheels service so that very few clients can be provided with meals for more than two days a week.

Questions 7 - Is the provision of sheltered housing consistent with value for money?

The provision of sheltered housing varied considerably between the four authorities. The authority with the highest provision provided approximately four times as much sheltered accommodation (per 1000 elderly) as the authority with the lowest provision.

No data was available to the study team on differences in the characteristics of the residents, nor was it clear what were in practice the net costs to the local authority of sheltered housing. It was therefore not possible to comment on the value for money of the provision.

However, in view of the different provisions and differences in the degree of involvement of the social services departments and housing departments, the study team concludes that data on resident characteristics and provision objectives ought to be assembled to support:

- an analysis of value for money of provision levels,
- an assessment of the appropriate role for the social services department in the allocation of vacancies and the management of resident wardens.

Question 8 - Are the total expenditures on community services consistent with value for money?

The total expenditure /1000 on local authority community services varies considerably; one of the four authorities spends about twice as much per head as the lowest spender of the four, even after standardising expenditure by allowing for differences in unit costs, demography, private sector contribution, and hospital/residential capacity.

The study team present arguments in Chapter 14 which tend to indicate that the least observed standardised total expenditure can be sufficient to ensure that all members of the 'high public sector dependency' group are given the basic personal care they require to be able to survive.

However, for this to be true, the community services have to be co-ordinated so that all receive at least one service. Also, there is evidence to suggest that the least observed total expenditure can be just about sufficient to ensure that all of the group have the non-personal care they require for basic survival, provided the services are co-ordinated well and in such a way as to mobilise potential for support from friends and relatives.

Furthermore, the least observed standardised community services expenditure incurred by the four authorities is also able to support a home help service to the 'low public sector dependency' group which can provide 4% cover of this group; as indicated under Question 4, this level of cover has been assumed to be sufficient to retain support for this group from friends and relatives.

Hence the study team conclude that the least observed standardised community services expenditure gives value for money, subject of course to the provision of service being efficient. Indeed, reference to the detail of Chapter 14 suggests that the least observed standardised expenditure could be increased by 10% and the arguments used would still apply.

The study team argues that it is then a matter for local judgement, having regard to local political aims, as to how worthwhile are the additional benefits to the elderly and to their friends and relatives which are gained by spending more than the least observed standardised expenditure plus 10%. The additional expenditure in question can be large; for the highest spending of the four authorities, the amount is equivalent to about £3 million annually for a half million population authority. (Of this amount, only about two thirds is under the direct control of the social services department, the remainder is connected with sheltered housing.)

The study team concludes that authorities - especially the higher spenders - should consider getting more information on the characteristics of the recipients of their community services to support effective allocation to individuals. Authorities should consider summarising and reporting this information to professionals and members for them to make explicit judgements on how much community care should be provided to the various groups of the elderly. The contribution of sheltered housing is critical to this decision; it requires effective co-ordination between the social services department and housing department.

Question 9 - Is the co-ordination of services consistent with value for money?

a) Is the co-ordination of community services with residential and hospital services effective in maintaining as many people in the community as is consistent with value for money?

b) Is the co-ordination of the different methods of community care consistent with value for money?

With respect to 9(a), the study team concludes that the co-ordination of provision was effective although the co-ordination of allocation of this provision to individuals was in question.

The study team found provision of residential places greater than the upper limit of its reference bracket only in the authority that was providing the lowest observed level of home help, and which was also spending the least in total on the domiciliary services of home help, day care and meals. By itself, this finding suggests that there may be scope for improving value for money by improving co-ordination of the provision of residential places and domiciliary care.

In fact, the authority in question focuses domiciliary service attention on people identified as being on the edge of requiring residential accommodation. However, while the study team understands that the authority is in the process of reducing its level of residential provision, it concludes that it may, nevertheless, be worthwhile for any authority with a high residential provision and low home help provision to review whether some people move into residential homes because some critical needs for domiciliary care are not being met; the review should recognise this might be happening because of the relatively heavy administrative burden on organisers in ensuring that the relatively small home help resource is well co-ordinated with other community services.

With respect to 9(b), the findings and conclusions for the two authorities that spend a relatively high amount on domiciliary care are different from those for the two authorities that spend relatively little.

For the two high spending authorities, co-ordination of community services is not a prerequisite for ensuring survival. While it is clear that the management of the home help service in the two authorities address the issue of co-ordination, it is not clear to the study team whether or not it is effective in ensuring as much value as possible for the money spent. The study team notes that while information may be being built up on the mix of local authority services given to each person receiving home help, this information is not summarised for resource management purposes to show the distribution of services for each main group of recipients. The study team concludes that it would be worthwhile for the authorities to review whether such summarised information would not make it easier to ensure that management of the allocation of the mix of services is consistent with value for money. Furthermore, there is likely to be scope for improving overall value for money by improving the information available on the overlap of the allocation of local authority community services and of the NHS district nursing services.

In the two low spending authorities, co-ordination is a prerequisite for ensuring survival of many people in the community. Since the study team finds that the amounts of provision of the various methods of community care could be sufficient - if well co-ordinated - to ensure a level of service necessary for survival, then, to the extent that problems from under-provision to the high dependency group are not manifest, it must follow that co-ordination is being effective in ensuring value for money with respect to the care given to the elderly themselves, and in mobilising the support of friends or relatives where this is feasible.

The study team notes the attention given to co-ordination of services in the two low spending authorities, either through building up and reviewing records of services offered to each client, or through identifying the individuals responsible for organising home helps as also responsible for co-ordinating the allocation of other methods of community care. These approaches seem worthy of consideration by other authorities.

Question 10 - What are the main sources of differences in expenditure between the four authorities?

There is a ± 30% variation in expenditure per elderly person between the four authorities. The study team accounted for the differences in expenditure using the following factors:

(i) the cost per unit of provision;

(ii) the percentage of over 75's in the elderly population;

(iii) the proportion of elderly people living alone;

(iv) the availability of hospital beds;

(v) the method of funding expenditure on wardens for sheltered housing schemes (i.e. between SSDs and housing departments);

(vi) the residential provision;

(vii) additional expenditure on community services.

The ± 30% variation is reduced to ± 20% after removal of the effect of the first five factors (the local economic and demographic factors, local hospital provision and sheltered housing payments) which are largely outside the control of the social services departments. Of the ± 20%, differences in residential provision account for ± 5%.

The percentages of expenditure in the participating authorities may be presented as follows (following the method followed in appendix 9):

	Authority			
	A	B	C	D
Economic and demographic factors, hospital provision and sheltered housing payments	25%	24%	(12%)	5%
Provision of residential places at a level above or below national average	3%	10%	(2%)	3%
Provision of residential places at national average level	27%	37%	47%	49%
Provision of community services at least observed expenditure	22%	24%	38%	38%
Additional expenditure on provision of community services	23%	5%	29%	5%
	100%	100%	100%	100%

Note:

(i) the (12%) for authority 'C' occurs because the authority has both lower costs and fewer over 75's than average.

It is suggested that this form of presentation would be of assistance to members and officers generally in questioning whether social services expenditure in their authority was consistent with local political aims.

S.11 Impact on the provision of services of projected changes in the elderly population

The projected increase, over the next 10 years, in the numbers of elderly in the population aged 75 or over will place additional strain on the effective allocation of facilities to those who can make best use of them. The increase will also require the provision of additional residential places, and/or additional community services, and/or other alternatives to residential accommodation currently being developed, such as very sheltered housing (Part 2½ accommodation).

After 10 years the annual cost of the additional services (on the basis of the current national average levels of provision) is estimated to increase to over £½ million for an authority with a population of half a million, and rather more to the extent that the present allocation of people to existing capacity is inappropriate in the terms of the suggested reference framework. For the average authority, this additional expenditure would be only about 25% larger than the amount by which the present national average expenditure on home helps exceeds the lowest expenditure on home helps of the four observed authorities; hence the source of finance for the extra services required by the growing number of dependent elderly is an important question to be resolved.

The study team concludes that social services departments should consider whether they have adequate procedures and information for planning the provision of resources by area, (including joint planning with the NHS and co-ordination with housing departments) and for the initiation of changes with long lead times - such as the construction of residential homes.

The study team concludes also that social services departments should consider whether they have adequate systems for planning and controlling changes in the provision of residential and community resources.

1. BACKGROUND - THE ELDERLY AND SERVICES PROVIDED TO THEM

1.1 Who are "the elderly"?

As a potential client group, "the elderly" are not easily defined, for example:

(i) the age at which a person may become eligible to receive an "old age" pension is dependent on the person's sex - 60 in the case of women and 65 in the case of men;

(ii) the ageing process is characterised for perhaps the majority of the population by declining physical ability/mobility (which may be accelerated at times by the effects of illness and/or accident); it may be associated in some more dependent cases with deteriorating mental ability (e.g. confusion) and/or by decreasing control over bodily functions (e.g. incontinence). There is considerable overlap between "the elderly" and "the physically disabled" - many of the more elderly in the population have some physical disability and it is estimated that the majority, perhaps 80-90% of the physically disabled are elderly.

For the purpose of this report, however, and in line with most available statistics the elderly population is defined simply to consist of those persons aged 65 or over irrespective of their physiological condition.

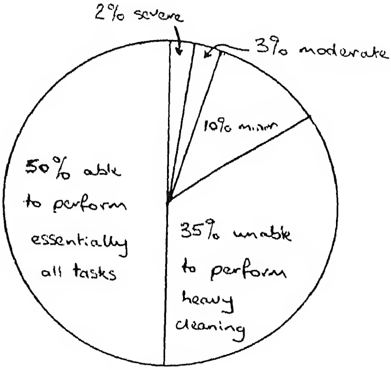
Using this definition, CIPFA Personal Social Services statistics (1980-81 actuals) suggest that the elderly population of England and Wales is approximately 7.4 million (15% of the total population of 49.3 million) of which some 2.8 million (38% of the elderly) are aged 75 or over.

The percentage of the population aged 65 or over differs considerably however between individual authorities; whilst the average for England and Wales is 15%, the range is from 9% to 28% (ratio 1:2.9). Similarly, the percentage of the elderly who are aged 75 or over differs considerably; whilst the average for England and Wales is 38%, the range is from 18% to 44% (ratio 1:2.4).

1.2 The elderly as a client group

The deterioration in physical ability/mobility generally associated with the ageing process, together with any decrease in mental ability or in control over bodily functions, according to their severity, necessarily increase the dependence of the elderly on the support of others for the performance of tasks which might previously have been performed independently.

The diagram below shows the study team's (very approximate) estimates (Appendix 2) of the range of physical disability within the elderly population:



(i) 50% of elderly people have no physical disability and are able to continue to live independently of any support;

(ii) a further 35% have no physical disability but are unable to perform heavy household cleaning;

(iii) 10% have minor physical disability characterised by an inability to perform some important domestic tasks in addition to heavy household cleaning - e.g. one or more of cooking main meals, shopping, light household cleaning - or perhaps by an inability to perform the personal task of washing all over;

(iv) 3% have moderate physical disability characterised, in addition to those tasks above, by an inability to prepare even a light snack or to perform some important personal tasks - e.g. one or more of dressing, washing hands and face, combing hair;

(v) 2% have severe physical disability characterised by a severe lack of mobility (bed-bound or chair-bound) or by an inability to eat and drink without help.

From the above, it is evident that approximately 50% of the elderly population are likely to be dependent on others for the performance of at least some tasks which might previously have been performed independently.

In many cases, especially where the degree of dependence is low, the availability to the elderly of support from friends and relatives may be adequate on its own to counter the effect of any disability present. Where the degree of dependence is higher, however, and/or where support from friends and relatives is not available (in Appendix 2 it is suggested that almost 50% of the elderly population have little or no such support available) then support may be made available through the services of a range of organisations.

1.3 The provision of services to the elderly

The major providers of services to the elderly are local authority social service departments and the National Health Service (NHS). Support is also available from a range of organisations in the private and voluntary sector.

The range of services provided is wide. Major services provided are:

(i) Local authority social services

Residential services	- both long-stay accommodation and also short-stay accommodation (e.g. to assist in the rehabiliation of elderly people themselves, or to provide relief for caring friends or relatives).
Day care services	- day centres and clubs.
Domiciliary services	- home help, meals-on-wheels.
Sheltered housing	- in conjunction with local authority housing departments.

In addition to the above services, local authority social services departments may also make monies available to provide a range of aids to the elderly, to make adaptations to their homes, to provide telephones and to provide holidays.

(ii) NHS

Residential services	- long and short-stay hospital beds for the elderly and mentally infirm.
Day care services	- day hospital.
Domiciliary services	- district nurse.

(iii) Private and voluntary sector (P&V)

The P&V agencies provide similar services to those provided by local authorities and, in some cases, to those provided by the NHS:

Residential services	- residential accommodation, nursing homes
Day care services	- day centres and clubs
Domiciliary services	- home help, some meals-on-wheels
Sheltered housing	- housing associations.

Thus there are three classes of environment in which the elderly may be accommodated:

- hospital (NHS)
- a residential establishment (provided by local authorities, or by the private and voluntary sector)
- the community (including those who are not in receipt of any services).

On the basis of the national average provisions of hospital and residential services, the proportion of elderly people accommodated in each environment is as follows:

Table 1.1 - The environment in which elderly people live

Living environment	Proportion of elderly people (per 1000)
Hospital	10
Residential home	17
Community	973
	1000

1.4 Local authority provision and expenditure in total

The elderly client group is the largest of the groups provided with services by local authority social services departments. (The following remarks are based on CIPFA Personal Social Services statistics - 1980-81 actuals).

To put the size of the group in perspective, whilst there were approximately 100,000 children under the age of 18 in the care of local authorities (equivalent to less than 1% of the total population under 18), there were approximately 125,000 elderly people accommodated in residential homes alone (either in local authority homes or in places provided by private or voluntary agencies and paid for by local authority contributions).

Together with the further 720,000 elderly cases attended by home helps during the year, and others in receipt only of meals, day care or other services then the number of elderly receiving some form of care from social services departments probably exceeds 1 million (equivalent to almost 15% of the total population aged 65 or over).

In terms of local authority expenditure, and without making any allowance for the allocation to the elderly client group of any of the £225 million spent by social services departments on fieldwork, or of the £265 million spent on administration, the net cost to social services departments of resources provided to the elderly in 1980-81 is approximately £650 million, or 36% of total expenditure. This is the largest percentage allocation of social services expenditure on any client group. The approximate division nationally is as follows:

Table 1.2 - National SSD expenditure (net) on social services for the elderly (1980-81)

Resource	Net expenditure 1980-81 £ million	% of total SSD expenditure on the elderly	Approx. no. of clients
Residential accommodation	359	55	125,000
Home help	200	31	720,000
Day centres and clubs	26	4	Data not available
Meals-on-wheels	19	3	"
Sheltered housing (contribution)	24	4	"
	628	97	
Other expenditure (e.g. multi-purpose day centres, aids and adaptations, telephones, holidays) partly on elderly and partly on other client groups Total £41m @ 50% (say)	20	3	
	£648	100%	

This represents an average expenditure of £87 per annum for each person aged 65 or over.

The pattern of resources provided, and the level of expenditure, differ substantially between individual authorities. The amount of variation is illustrated below. For each statistic, the table provides the data for the 10th and 90th percentile authorities and the ratio between the values; corresponding minimum and maximum values are also tabled for comparison.

Table 1.3 - Variation in social services provision and expenditure between local authorities (1980-81)

Net expenditure per person aged 65 or over:	Percentile analysis			Min./Max. analysis		
	10th percentile	90th percentile	Ratio	Min.	Max.	Ratio
- total £	£51	£108	2.1	£35	£236	6.7
- % on residential care	46%	66%	1.4	34%	74%	2.2
- % on home help	25%	42%	1.7	16%	59%	3.6
- % on day care	-	10%	-	-	18%	-
Numbers cared for (per 1000 population aged 65 or over) in residential homes:	14	23	1.6	13	42	3.2
Number of home helps (full time equivalents per 1000 population aged 65 or over) provided:	4	12	3.0	3	18	6.0

Source - CIPA Personal Social Services Statistics (1980-81 estimates).

1.5 Public sector expenditure in total

It is not easy to assess the total net public expenditure incurred in providing services to elderly people; whilst CIPFA statistics provide some information on costs incurred by local authority social services departments (see 1.4 above, and table 1.2), less information is readily available on costs incurred by the NHS or by the DHSS (e.g. pensions) nor is information available on any extent to which local authority housing departments incur additional net expenditure through the provision of sheltered accommodation, rather than any other type.

In terms of expenditure incurred by the NHS, a report published by the DHSS in 1981 ("Community Care", Ref. 1) gives provisional figures for net expenditure in 1978-79 in England only (Programme Budget - Hospital and Community Health) including approximately £330 million for "geriatric in-patients" and £110 million for "district nursing" (the majority of which is likely to be directed towards elderly people). No data is shown separately for expenditure on day hospitals for elderly people nor on other community - based services except for "chiropody" (£14 million).

Recent data is available on the extent to which local authorities have utilised monies made available through the NHS in the form of "joint finance". CIPFA Personal Social Services statistics (1980-81 actuals) show that local authority expenditure of approximately £53 million (£34 million revenue, £19 million capital) was financed by area health authorities in England and Wales. It is estimated that approximately 40% of joint finance is utilised for services provided to elderly clients ("Community Care", above).

Net public expenditure incurred in the provision of direct services (residential, day care and domiciliary services) by local authority social services departments (section 1.4) and the NHS (above) - i.e., excluding payments made to elderly people by the DHSS and also the cost of primary care provided by GP's - is probably, therefore in the region of £1,200-£1,500 million p.a.

2. THE STUDY

2.1 Objectives of the study

This study is concerned with the value for money achieved by local authority social services departments in the care of the elderly.

The objectives of the study are:

(i) to identify factors underlying the observed differences in the patterns of care provided to the elderly by social services departments in different local authorities;

(ii) to review the impact these factors have on the costs of care provided and the value for money attained.

2.2 Approach

The approach to this study is similar to that for the child care and mentally handicapped studies undertaken on behalf of the District Audit Service.

The approach adopted is in two parts:

(i) a brief review and analysis of national data to gain some insight into the range of differences observed in practice and the extent to which factors outside the control of the social services department might affect the services provided;

(ii) a comparative review of the provision of services to the elderly made by a number of authorities, these authorities being selected to span a wide range of characteristics of their provision for the elderly and chosen to give a range of high and low levels of provision (and/or costs) of particular types of care with, where possible, some indication of a commitment to different philosophies of care.

The work performed at the selected authorities consisted of:

- conducting interviews with officers and staff of the social services department (and the housing and treasurer's departments where necessary) to understand the authority's policies with regard to the care of the elderly and to appreciate their objectives;

- visiting residential and day care establishments, and area social work offices, both to interview the relevant officers in charge and to collect detailed data concerning the characteristics of the services provided, and of the clients in receipt of home help;

- collecting data on the provision of services and on the capital and revenue costs of the care provided to the elderly;

- contacting local health authority officers in order to collect any readily available health service data relevant to the care of the elderly.

The above work, performed at the selected authorities, was followed by a significant period of time during which a method of analysis for the data collected was developed and subsequently applied.

3. VARIATIONS IN PROVISION OF CARE TO THE ELDERLY BY LOCAL AUTHORITIES IN ENGLAND AND WALES

3.1 Introduction

This chapter provides an overview of national statistics to indicate the wide extent of variation in financial provision, and to indicate how the variation is reduced but not explained by taking account of certain factors.

The chapter focuses on the provision made by authorities in terms of both total net expenditure on the elderly (excluding fieldwork and administration costs) and the major resources provided - residential care and home help; the effect of differences in the availability of NHS hospital beds for the elderly is also considered.

Data on the net expenditure and provision made by local authorities in England and Wales presented in Exhibits 3.1-3.6 and 3.8-3.9 has been extracted from CIPFA Personal Social Services statistics (1980-81 estimates; actuals were not available at the time of doing the study); these exhibits include all authorities for which the relevant data was available. Data on the provision of NHS geriatric beds by health region (1978) has been extracted from the Hospital and Health Service Year Book (Ref. 3); the local authority residential provision with which it is compared in Exhibit 3.7 has been extracted from CIPFA statistics (1978-79 actuals).

3.2 Net local authority expenditure on the elderly

As a starting point for this discussion, Exhibit 3.1 shows the net expenditure per annum per 1000 elderly people aged 65 or over for each authority in England and Wales; (the ratios between the 90th and 10th percentile authorities, and between the highest and lowest expenditure authorities are the 2.1 : 1 and 6.7 : 1 respectively presented in table 1.3).

Since many those aged 65-74 (62% of the elderly) are not likely to be in receipt of any local authority social services, Exhibit 3.2 presents the same net expenditure figures as Exhibit 3.1 but per 1000 elderly people aged 75 or over. The difference between the 90th and 10th percentile of total net expenditure per 1000 elderly people aged 75 or over is ± 42%. The remainder of this chapter reviews the impact of various factors on this range of variation.

The majority (86%) of net expenditure on the elderly comprises expenditure on residential accommodation (55%) and on home help (31%); further analysis in this chapter focusses on these two major services; furthermore, anticipating the observations of section 14.2 that the overall provision of residential care by a local authority appears in effect to be independent of the overall provision of home help, the two services are considered separately.

3.3 Residential care

Exhibit 3.3 provides a histogram of net expenditure per annum on residential places per elderly person aged 75 or over (i.e. part of Exhibit 3.2); the variation between the 90th and 10th percentile authorities is ± 37%.

Data available has allowed the study team to provide a measure of the extent to which the following factors account for at least some of this variation:

(i) Different levels of cost - both inner and outer London authorities incur additional employee costs in terms of London weighting and allowances; this weighting attempts to compensate employees for the generally higher levels of cost in these types of authorities. In order to remove this effect, Exhibit 3.4 presents a histogram of the provision of residential care in terms of places provided to elderly people; the measure of variation between authorities on this basis is reduced from ± 37% to ± 25%, demonstrating that different levels of cost account for some of the original variation.

(ii) Proportion of elderly living alone - the study team has assumed that a higher proportion of elderly people living alone is likely to provide extra pressure for residential places; for the purposes of analysis, it has been further assumed that if an authority has, say, twice as many elderly people living alone than the average for all authorities, then twice as many residential places than the average will be required. Exhibit 3.5 presents a histogram of the provision of residential places per 1000 elderly people aged 65 or over, standardised both for different age structures and for differences in the proportion of elderly people living alone; the measure of variation between authorities on this basis is reduced to ± 21%. Whilst the assumption made above is likely to overstate the effect of differences in the proportion of elderly people living alone, the reduction in variation does suggest that this factor has some effect on overall variation.

Another factor which might be expected to contribute to explaining variation in the level of residential accommodation is variation in the level of NHS hospital bed provision for the elderly. Exhibit 3.6 plots the available number of geriatric beds in each NHS region against the number of elderly in local authority residential care in that region. Although the available number of geriatric beds is not an accurate measure of the number of elderly in long stay hospital beds (see chapter 8) and the figures are not corrected for differences in age structure and proportions living alone, the graph does not indicate that residential places increase as hospital places decrease; hence, overall, hospital place provision does not contribute significantly to explaining residential variation.

Home help

Exhibit 3.7 provides a histogram of net expenditure on home help per elderly person aged 75 or over (i.e. part of Exhibit 3.2); the measure of variation between authorities provides a range of ± 56% on this distribution:

Data available has allowed the study team to provide a measure of the extent to which the following factors account for at least some of this variation.

(i) Different levels of cost - as for residential care; The measure of variation between authorities is reduced to ± 53% (Exhibit 3.8).

(ii) Different age structure - approximately one third of home help goes to elderly people aged 65-74 and therefore variations between authorities in the proportion of elderly people aged 65-74 will necessarily affect the requirement for home help. Removing this effect reduces the variation between authorities to ± 52% (Exhibit 3.9).

3.5 Summary

The above arguments may be represented as follows:

Table 3.1 - the effect of certain factors on the % variation in net expenditure between authorities in England and Wales

Total expenditure
± 42%

Expenditure on residential care and home help before applying factors
± 41%

Expenditure on residential care		Expenditure on home help
± 37%	Before applying factors	± 56%
± 25%	After - removing regional cost differences, and	± 53%
± 21%	- making allowance for proportion living alone (i), and	
	- making allowance for proportion aged 75 or over (ii).	± 52%

Expenditure on residential care and home help after applying factors (iii)
± 30%

Notes:

i) The derivation of the ±21% variation assumes that the requirement for residential places is proportional to the number of elderly living alone.

ii) Over 80% of the elderly in residential accommodation are aged 75 and over and standardising for the variation in the proportion of the elderly aged 75 and over has little effect.

iii) The ±30% is derived by calculating the equivalent expenditure on residential care and home help for each authority using a standard demography and standard costs.

Thus of the ± 42% variation in the total expenditure per person aged 75 or over, ± 11% is explained as above.

The remaining chapters of this report analyse the factors contributing to the remaining ± 31% variation in expenditure on the basis of findings in the four authorities.

4. THE AUTHORITIES SELECTED FOR REVIEW

4.1 Basis for selection

As discussed in Section 2.2, the authorities selected for detailed review were chosen to span a wide range of characteristics of their provision for the elderly and to give a range of high and low levels of provision (and/or costs) of particular types of care with, where possible, some indication of a commitment to different philosophies of care. The basis for selection was a review of CIPFA Personal Social Services statistics (1980-81 estimates). The authorities selected were in two pairs - two inner London boroughs (authorities 'A' and 'B' in this report) and two metropolitan boroughs (authorities 'C' and 'D' in this report). The findings detailed in this report will, therefore, require confirmation and extension by reference to services provided by Shire counties.

4.2 Expenditure incurred and resources provided by the selected authorities

The tables below provide an overview of the differences that exist between the authorities selected in terms of the net expenditure on the elderly incurred in 1980-81 (table 4.1), and also in terms of the range of resources provided (table 4.2).

able 4.1 - SSD Expenditure on the elderly per person aged 75 or over (1980-81)

	Inner London Boroughs				Metropolitan Boroughs			
	Authority 'A'		Authority 'B'		Authority 'C'		Authority 'D'	
	£	(%)	£	(%)	£	(%)	£	(%)
esidential care	220	(41)	222	(67)	101	(35)	143	(56)
ome help	161	(30)	71	(21)	154	(54)	70	(28)
ay centres/clubs	77	(14)	14	(4)	7	(2)	6	(2)
eals-on-wheels	34	(6)	19	(6)	6	(2)	4	(2)
heltered housing (contribution)	14	(3)	-		17	(6)	27	(10)
ther community care	29	(6)	8	(2)	3	(1)	4	(2)
	£535		£334		£288		£254	

Notes:

(i) The figures presented have been computed in terms of expenditure per annum per elderly person aged 75 or over, rather than 65 or over, since previous research has shown that a large proportion of those aged 65-74 are not likely to be in receipt of any services provided by the social services department.

(ii) The population figures used in compiling the table are those used by the authorities themselves for planning purposes at the time of the study team's visit. The results of the 1981 Census were not available at the time of the study to the authorities for their planning

Table 4.2 - SSD funded resources available per 1000 persons 65 or over

	Inner London Boroughs		Metropolitan Boroughs		DHSS Norms for 1983
	Authority 'A'	Authority 'B'	Authority 'C'	Authority 'D'	
Residential (places)					
- authority	19	19	13	21	
- OLA (i)	-	-	-	-	
- P&V (i)	4	12	2	1	
Total	23	31	15	22	25
Home help (fte) (ii)	13.2	5.8	15.8	7.4	12
Day centres (places)					
- with transport (iii)	4	3	1	2	
- without transport	28	1	-	-	
- P&V (iv)	-	2	-	-	
Total	32	6	1	2	3-4
Meals (per week)					
- meals-on-wheels	183	89	96	43	
- lunch clubs	276	30	18	21	
Total	459	119	114	64	200

Notes:

(i) The figures represent resources provided directly by the social services departments, or made available to them by other organisations as a result of the departments' expenditure (e.g. accommodation provided by other local authorities (OLAs) or by the private and voluntary (P&V) sector).

(ii) The help provided by these home helps is not all directed to elderly clients - this factor is taken into account later in the report (chapter 10).

(iii) The proportion of day care with transport in authority 'A' was estimated from an analysis of clients using transport in a particular week.

(iv) Authority 'B' bears the cost only of providing transport for this voluntary day centre.

(v) These figures have been computed in terms of resources per thousand elderly persons aged 65 or over (cf.75 or over in table 4.1) to facilitate comparison with the national norms for 1983 published by the DHSS in 1973 in its 10 year plans for Health and Personal Social Services.

The reader should not therefore attempt to compute and compare 'unit costs' on the basis of tables 4.1 and 4.2. Where unit costs are used in this report they have been computed on the basis of the detailed data underlying these two tables (see appendix 4); differences in unit cost between authorities that arise from the appropriate computations are discussed in the chapters on individual resources (chapters 9-13).

SOUTHAMPTON UNIVERSITY LIBRARY

The following table summarises the characteristics of the two pairs of selected authorities (as in table 1.3) in relation to the position of all authorities in England and Wales, based on CIPFA Personal Social Services statistics (1980-81 estimates).

Table 4.3 - Summary characteristics of authorities visited

	Authorities			
	Inner London		Metropolitan	
	'A'	'B'	'C'	'D'
Net expenditure per person aged 65 or over:				
- total £	Very high	Very high	High	Typical
- % on residential care	Very low	Very high	Very low	High
- % on home help	Typical	Very low	Very high	Typical
- % on day care	Very high	Typical	Low	Typical
Numbers cared for in residential homes/1000 aged 65 or over	High	Very high	Typical	High
Number of FTE home helps provided/1000 aged 65 or over	Very high	Typical	Very high	Typical

Note:

Very low : 0-10th percentile of authorities in England and Wales

Low : 10th-30th " " " " " " "

Typical : 30th-70th " " " " " " "

High : 70th-90th " " " " " " "

Very high : 90th-100th " " " " " " "

4.3 Philosophies of care in the selected authorities

During the visits to the authorities, the following views towards the philosophy of care for the elderly were expressed:

Authority 'A'

- A priority to community-based care;
- domiciliary care is basically preventative;
- the provision of a diverse set of resources:
- the non-substitutability of different services for one another.

Authority 'B'

- Client choice;
- Provision of services to reflect the demand for them;
- Scarce resources to be directed to those who need them;
- Liason between social services and health services vital.

Authority 'C'

- A priority to community-based care;
- domiciliary care is basically preventative;
- domiciliary services are provided to help the client remain in the community by providing some support.

Authority 'D'

- Allocation of services according to need;
- Co-ordination of domiciliary services.

5. SUB-GROUPS OF THE ELDERLY POPULATION

5.1 Broad Groups

For the analysis and discussion of the service provided to the elderly, the study team has found it convenient to divide the elderly population first into two broad groups:

- the 'highly dependent',
- the 'less dependent'.

For the purposes of analysis, however, it is necessary to further divide each of these broad groups according to the characteristics of the elderly people included in them. The characteristics of the elderly people falling into each of these broad groups, and the further sub-divisions required are discussed below.

5.2 The highly dependent

Under this heading are included two broad categories of the elderly:

- the severly physically disabled (1.7% of the 65+)
- the moderately physically disabled (3.1% of the 65+)

The severly physically disabled are not mobile at all without help; they are bedfast or chairfast; they require help both with the personal tasks which can be undertaken at pre-determined times (getting up, washing, dressing, eating, going to bed), and with the frequent but regular 'non-postponable daily tasks' (getting a drink, going to the toilet).

The moderately physically disabled have some mobility but not much; they require help with at least some of the personal tasks which can be undertaken at pre-determined times, but they can cope with the 'non-postponable daily tasks'.

Analysis of the data from a project carried out under the auspices of the DHSS involving consultants from Arthur Andersen & Co. ("Balance of Care" Ref. 4) at two local authorities (not authorities 'A', 'B', 'C' or 'D') indicates that the highly dependent - though only 5% of the elderly population - consume by far the largest part of the NHS provision of services to the elderly, about three quarters of the SSD provision of residential services, and about a quarter of the SSD expenditure on community services. Furthermore, as the population ages, the importance of the groups will increase further.

3 Highly dependent sub-groups

Within the highly dependent group it is useful to distinguish 7 sub-groups which differ in disability and the amount of support friends and relatives are able and willing to give and which, therefore, require different services to provide adequate life support.

The seven highly dependent sub-groups are as follows:

Table 5.1 - Highly dependent sub-groups

Degree of physical disability	Sub-group	Identifying characteristics	Estimated size of group/1000 (appendix 2)(i)
Severe	1	Behaviour disorders	4
	2	No behaviour disorders, but little support from friends or relatives.	3
	3	No behaviour disorders substantial support from friends or relatives, but complicating factors (such as dementia, incontinence)	5
	4	No behaviour disorders, substantial support from friends or relatives, no complicating factors.	5
Moderate	5	Behaviour disorders	5
	6	No behaviour disorders, but little or no support from friends or relatives	8
	7	No behaviour disorders, substantial support from friends or relatives	18
			48

Note:

(i) The size of each group is stated "per thousand persons aged 65 or over" and is estimated by the study team from data published in a survey by Audrey Hunt (Ref. 5) and from work done by Arthur Andersen & Co. in the "Balance of Care" project on behalf of the DHSS based on surveys in two local authorities (Ref. 4(iv)). The estimates for the size of each group apply to England and Wales. Adjustments to these estimates have been made for authorities 'A', 'B', 'C', and 'D' to allow for differences in the prevalence of physical disability (using CIPFA 1980/81 actuals for the ratio of people aged 75 and over to people aged 65 and over) and support from friends or relatives (using 1971 census data for pensioners living alone) - see appendix 2. However, as in other work of this kind, the reasonable assumption is made that the prevalence of other classification factors (dementia, incontinence) for determining the groups is similar across the country.

5.4 The less dependent

Under this heading are included two broad categories of the elderly:

- those with some physical disability which is minor relative to the disability of the highly dependent
- those with no specific disability (who might for most purposes by considered 'independent')

The elderly with some minor physical disability are mobile within the home and can perform personal tasks (apart perhaps from washing all over), including - what is important for the analysis - the non-postponable personal tasks. They are unable, however, to perform one or more of the following domestic tasks - cooking main meals, leaving the home alone to shop or collect pension, light household cleaning. Work performed in Devon and Cornwall (Ref. 6) and also work performed on the DHSS "Balance of Care" project suggests that most of the group find it difficult to leave their homes without assistance to do things such as heavy shopping or boarding transport.

The elderly with no specific disability are mobile and are able to perform all personal and domestic tasks (apart perhaps from heavy household cleaning).

5.5 Less dependent sub-groups

Within the less dependent group it is useful to distinguish 3 sub-groups which differ in disability and the amount of support friends and relatives are able and willing to provide and which, therefore, require separate consideration for the provision of services. These are described in the table below.

Table 5.2 - Less dependent sub-groups

Degree of physical disability	Sub-group	Identifying characteristics	Estimated size of group/1000 (appendix 2)
Minor	8	(a) with dementia, or (b) more than one of the following:- - unable to perform any of the domestic tasks - incontinence - inadequate housing (variations in the prevalence of which have little effect on the estimated size of the sub-group). Little or no support from friends or relatives	6½
	9	No dementia and none or one of the following:- - unable to perform any of the domestic tasks - incontinence - inadequate housing Little or no support from friends or relatives	38½
(a) Minor (b) No specific disability	10	a) Unable to perform one or more of shopping, light household cleaning and cooking main meals, but with support from friends or relatives or b) Able to perform all of the above domestic tasks, either able or unable to perform heavy household cleaning.	907
			952

6. THE RESOURCES SERVING THE ELDERLY

6.1 Introduction

Sections 1.3 and 1.4 outline the services that are provided for the elderly. Each service supplies a resource or resources to the elderly, and the value for money of providing these resources is determined by the balance between the value of providing each resource - to the elderly person himself, his family and friends and/or society at large, either singly or in combination with other resources - and the cost incurred by providing that resource. In addition, although the cost of providing the resource is solely a characteristic of that resource in a particular authority, the value of providing that resource will depend both on the characteristics of the elderly individual himself and the relative importance given by local policy makers to different dimensions of achievement.

6.2 Dimensions relevant in the care of elderly individuals

Each resource can contribute in various ways to the care of an elderly person, i.e. along various dimensions. The dimensions relevant to the elderly person himself have been categorised for the study as follows (Ref. 2):

(i) Physiological dimensions

- Personal care:	concerned with an elderly person's ability to perform such personal tasks as getting up, washing and bathing, dressing, going to the toilet, eating and drinking, going to bed.
- Nutrition:	concerned with an elderly person's ability to provide for himself a balanced diet.
- Environment:	concerned with an elderly person's ability to maintain his surroundings in a habitable state through, for example, household cleaning, or to move independently out of his home to perform tasks such as shopping or collecting pension.

(ii) Security

Concerned with the extent to which an elderly person is at risk of suffering an undetected adverse change in circumstances: the degree of instability in an elderly person's circumstances may suggest a requirement for 24 hours a day supervision services ('active' security) or for regular monitoring services ('passive' security).

iii) "Connectability"

Concerned with the extent to which an elderly person is able to 'mix' within his community, should he wish to do so.

Resources can also contribute to dimensions relevant to groups other than the elderly individuals themselves:

(i) for the family or living group (relations or friends) - concerned with their ability and willingness to continue providing support;

(ii) for society at large - concerned with their freedom from unreasonable annoyance.

The provision of resources also contribute to a dimension concerned with inhibiting the rate of deterioration in the circumstances of elderly individuals.

6.3 Contribution of the resources

The nature of the contribution of the various SSD resources to achievement along various important dimensions is summarised in table 6.1.

To achieve value for money, the mode of care (hospital, residential or community) to be offered to a particular individual should be the least expensive of those alternative modes of care which can provide adequate achievement along the various dimensions which are judged to be important in connection with that individual. It is therefore necessary, first, to identify very approximately what are the costs of the alternative modes; these modes depend either on single resources or on 'packages' of resources.

6.4 Single resource costs

The study team has analysed data made available to them on the net revenue costs associated with resources commonly provided to the elderly to arrive at a 'representative' net revenue cost per unit of each resource. (Differences between authorities in terms of both gross and net costs are discussed, by resource, in sections of chapters 8-13). These net costs are presented in table 6.2.

The cost of providing a service may be borne by the agency providing that service (NHS or local authority), the client himself, or a combination of the two. When examining value for money, the study team has considered only the direct net revenue cost to the agency of providing the service, and has not made any allowance for differences in the financial contribution by individuals because of their different financial circumstances.

6.5 Package costs

It is evident from table 6.1 that in some cases more than one community-based service may provide for achievement along a particular dimension; these services may then be considered as alternatives for that dimension. For the more highly dependent elderly clients, however, where care is required along multiple dimensions, it is also evident that whilst hospital or residential care may provide an adequate level of achievement along each of the important dimensions, no single community-based service can do the same. Only if a number of community-based services are combined to provide a 'package of care' can an adequate level of achievement be obtained along all of the relevant dimensions for the community-based care to be considered as an alternative to, for example, residential care.

The cost of a package of community-based services is, however, dependent on the types of services included and the level and frequency at which they are provided. In order to provide approximate reference costs for community-based packages of care, the study team has made assumptions concerning the types and levels of services included, based on a review of published research (Ref. 4(iv)) and on the results of analysis performed at the authorities visited. The net reference cost to a local authority of each of the four packages presented in table 6.3 below is calculated from the representative unit costs presented in table 6.2.

The definition of the net costs of each mode of care is complicated by issues such as change in social security benefits and allowances depending on mode and which body bears the capital costs when the mode of care changes. These factors would only affect the conclusions in this report if their net effect was to make the intensive domiciliary mode of care substantially more expensive on average than residential care for those clients for whom both modes of care are feasibile alternatives, (i.e. to increase the average relative cost of intensive domiciliary care by substantially more than £17 per week). The study team has assumed this not to be the case.

Table 6.2 – Representative net costs of major resources provided to the elderly, by care environment

Mode of care	Paying agency	Type of resource and unit of cost	Representative revenue cost (net)
HOSPITAL	NHS	Bed/week (geriatric hospital)	£190 (i)
RESIDENTIAL	LA	Long stay place/week	£ 50 (ii) (excl. capital charges of £7)
COMMUNITY	LA	Day care/attendance: - with transport (for more dependent)	£ 8 (iii)
		Home help/hour with client	£ 2.4 (ii)
		Meals-on-wheels/meal delivered	£ 0.7 (ii)
	NHS	District nurse/visit	£ 4 (i)

Notes:

(i) Based on NHS averages for regions in England and Wales (1978-79 actuals, Ref. 7) inflated by the percentage increase in the net cost of SSD residential accommodation between 1978-79 (CIPFA Personal Social Services statistics, actuals) and 1980-81 (CIPFA actuals).

(ii) Based on England and Wales averages (CIPFA Personal Social Services statistics (1980-81 actuals)).

(iii) Based on average cost in the 4 authorities visited (CIPFA statistics contain no data).

Table 6.3 - Cost to a local authority of various packages of care

Resource	Unit	Package I	Package II	Package III	Package IV
Home help	hours/week	9	6	6	6+
Meals-on-wheels	meals/week	7	5	2	-
Day care	attendances/ week	-	2	5	7
Short-term residential care (i)	weeks/year	4	4	4	8+
Net reference cost (weekly equivalent)		£30	£37	£57	£71 (min)

Note:
(i) the cost per week of a short-term residential place has been taken to be equivalent to the reference cost per week of a long-term residential place (£50 excluding capital charges) plus an allowance of 50% to cover the additional costs likely to be associated with the rate of turnover in clients receiving short-term residential care.

Packages I and II are intended to provide support on a 7 day per week basis, as a potential alternative to residential care, to those elderly without behaviour disorders who have been described as "moderately physically disabled, and without support from friends or relatives" (sub-group 6), or to those elderly (and to their caring friends and relatives) described as "severely physically disabled, but with substantial support from friends or relatives" (sub-groups 3 and 4).

In order to provide a substantial level of support within the community to these elderly persons it is likely that further support will be required through visits from a district nurse (for personal tasks). If the combined net cost to a local authority and the NHS is to be broadly equivalent to the representative net cost incurred by a local authority in providing long-term residential care then the 'saving' in local authority net cost will support the provision of 4-5 visits per week from a district nurse.

In package I, home help and district nursing provided are assumed to perform personal tasks including dressing/bathing and domestic tasks for those moderately disabled, and to provide relief for the caring friends or relatives of the severely disabled in the performance of similar tasks. Short-term residential care, at regular intervals, is assumed to assist these moderately disabled without support to remain in the community by providing an opportunity for periods of more intensive care; residential care provided to the severely disabled with support is assumed to provide relief to caring friends or relatives (e.g. whilst they are on holiday).

In package II, day care is included to provide some personal care for both the severely and moderately disabled; it is assumed to provide support to the home help and district nursing services, and additional support to the caring friends or relatives of the severely disabled. Day care also provides "connectability" for the elderly people themselves.

Packages III and IV further develop the day care content of the community-based package of care. As as result, the net cost to a local authority alone of each of these packages is either similar to, or exceeds the net cost of long-stay residential care (including capital charges); it is likely that further support from a district nurse will continue to be required. Day care up to and including 7 days per week is provided by at least one of the authorities visited.

It is considered unlikely by the study team, however, that either of these packages would be regarded as a minimum alternative to residential care for either the moderately disabled without support or for the severely disabled with support - rather that they might be provided to more highly dependent elderly people remaining in the community who, if requiring such a level of support, might otherwise be in hospital.

The analysis of the reference costs of community-based packages of care above does not take into account any allowances (e.g. mobility allowances) which may be available from the DHSS to elderly people remaining in the community and which may, therefore, make the cost to the public sector as a whole of even packages I and II somewhat greater for the community-based option than for long-term residential care.

6.6 Summary of representative net costs

A summary of the data presented above and in table 6.2, for the preliminary purpose of establishing a very approximate hierarchy of the net costs of providing services to elderly people is presented in table 6.4.

This cost hierarchy makes it clear that there are pronounced cost differences between the three broad categories of care - hospital, residential or intensive domiciliary and less intensive domiciliary, and in addition that intensive domiciliary care is unlikely to be substantially more expensive than residential care to the public sector and will usually be cheaper to the local authority.

Note on other modes of care

In addition to the three broad categories of care listed above, certain other modes of care are provided in some local authorities, in particular: very sheltered housing (Part 2½ accommodation), 'rotating beds' (whereby the elderly person alternates between residential care and care in the community on a planned regular basis) and fostering. None of the four authorities provided any of these modes of care at the time of visiting and this interim report does not address the possible value for money of such modes to particular groups of clients.

Table 6.4 - Hierarchy of net costs incurred in providing services to elderly people

Care provided	Net cost incurred (£/week)	
	SSDs	Public sector
NHS institutional	-	£190
Package of community care when a feasible alternative to NHS institutional care (Package IV, including minimum 7 visits per week by district nurse)	£70(min)	£ 95(min)+
Package of community care providing exceptional level of support as alternative to residential care (Package III, including 5 visits per week by district nurse)	£60	£ 80+
SSD residential	£50+ capital charges	£ 50+ capital charges
Package of community care as alternative to residential care (Package II, including 4 visits per week by district nurse)	£40	£50+
Package of community care as alternative to residential care (Package I, including 5 visits per week by district nurse)	£30	£50+
Community care where residential placement is not considered necessary to provide adequate care	Dependent on the dimensions judged important and the consquent range and frequency of resources provided (table 6.2)	

Note:

(i) "+" on public sector cost figures covers any extra costs of day hospital if provided by the NHS and/or DHSS allowances.

7. THE METHODOLOGY FOR COMPARISON

7.1 Absence of data

None of the authorities visited maintained data which would have enabled the study team to make direct observations of how many individuals are in each sub-group in each authority, or of how people in each sub-group are treated by each authority. The study team has, however, performed a limited amount of survey work at each authority in order to review the characteristics of a sample of the authority's clients, and of the services provided to them.

The team has also not been made aware of any method in general use for the allocation of resources to people in each sub-group on explicit and comprehensive criteria, although partial systems are available in some authorities.

However, the different requirements of each sub-group, the different capabilities of the resources in satisfying the requirements, the different costs of the resources, and the different weights that may be attached by different policy makers to achievement along different dimensions of the elderly - all have an effect on the value for money of the services offered. Furthermore, all should have an explicit effect on attempts to change the mix of services provided so as to increase value for money.

7.2 Reference framework for comparisons

In the absence of the data which in the study team's view is necessary to support the segmentation of the problem, and which is necessary for identifying when value for money could be improved, the study team has synthesised a reasoned view of the segmentation and of some of the levels of service consistent with value for money.

The team has made assumptions (based on previous research, and views and data collected during visits to the selected authorities) about the types of services that would need to be offered to individuals in each of the sub-groups of the elderly population. These assumptions are presented in each relevant chapter so that the reader of this report should be able to identify the differences between these assumptions and his own judgements and to follow through the consequences of the differences on the conclusions; the study team doubts, however, whether differences in judgement will lead to major changes in conclusions on the types of care which are appropriate, although it may be that better local information on, particularly, the extent of support by friends and relatives will modify some of the numerical conclusions.

Against the resulting framework of the number of units of service and their allocation, the achievements for money of the four authorities visited as part of the study are assessed and compared in so far as the study team believes they can be without making judgements on the basis of local political aims.

In the following chapters, the question is addressed - "what types of resources are required to care for each of the 10 sub-groups of the elderly at minimum cost and what is the nature of any additional benefits that might result from expenditure at higher levels?"

The answers, based on the study team's assumptions, provide a reference framework for the analysis and comparison of the services actually provided by the authorities visited.

The next three chapters consider in turn what is assumed to be the necessary use for each sub-group, first, of the most expensive resource - hospital beds, then of residential places, then of the major component of domiciliary care - home helps. The logic underlying the choice of resource for each sub-group is outlined in appendix 1.

The remaining methods of care - day care, meals, sheltered housing - are considered in three further chapters, after which the important matters of co-ordination of services and the provision of services in the future are considered.

8. HOSPITAL BEDS

8.1 Introduction

The study team is concerned with addressing the issue of value for money of services provided to the elderly by local authorities. Nevertheless - because of its knock-on effect on the services required from local authorities - the study team has had to address the matter of the number of beds provided by the NHS for the elderly and the allocation of these beds to different groups of the elderly.

Long and short stay hospital beds for the elderly are required mostly for the highly dependent. It is the provision of long stay beds that concerns the study team primarily since elderly occupying these beds are removed from the community where they would otherwise require support from domiciliary services or from friends and relatives. The needs for the relevant sub-groups are assumed to be as follows (sub-groups without behaviour disorders are presented first):

8.2 Group 2 - the severely disabled who would receive little or no support from friends and relatives, either because there are none or because a community care package cannot be offered which is sufficient to make friends or relatives willing to provide care.

The individuals in this group are obvious candidates for hospital care. The study team has understood from its visits that it is unlikely that the demands for substantial active support from more than 'a few' clients from this group could be satisfactorily accommodated within the schedule of any residential home of the type provided by most local authorities. The interpretations of ' a few' range from 'one or two' clients per home, who would represent about 4% of the total in residential accommodation (i.e., only about 20% of group 2, 4% of the severely disabled or ½/1000), to the 10% of total clients in residential accommodation observed in authorities 'A' and 'D' (i.e., about 60% of group 2, 10% of the severely disabled or 1½/1000); these clients would be present in a SSD residential home if only because of the deterioration of people who had entered the home when less disabled, but had not transferred subsequently to hospital.

In hospital, achievement should be adequate along the physiological and security dimensions discussed previously. 'Connectability' however may not be adequate, but nor perhaps is it for group 2 even if it were possible for them to remain in the community.

Thus, of the 3/1000 estimated in table 5.1 for group 2, the above argument leads to about 1½-2½/1000 requiring hospital beds.

8.3. Group 3 - the severely disabled who could receive substantial support from friends or relatives but who have complicating factors such as severe incontinence or dementia.

The members of this group are assumed to have a major claim for hospital care. Sufficient achievement along the physiological and security dimensions to provide adequate levels may be very difficult even with a very intensive domiciliary care package, so that hospital care is likely to offer the elderly individual in this group significant extra achievement as compared to staying in the community. However, the achievement in 'connectability' is likely to suffer, and if connectability with friends and relatives is given sufficient weight by the elderly individual or by SSD policy, then a very intensive domiciliary care package might be judged to provide a more highly valued achievement by the elderly individual. The issue is complicated further by considering the value to the friends or relatives for whom the burden of care may become too heavy. On balance, for the reference framework, the assumption has been made that at least those in inadequate housing and many of the rest of the 5/1000 shown in table 5.1 in group 3, say 4/1000, ought to be in hospital. (Because of the complicating factors they are even less suited to SSD residential accommodation than many of group 2).

Thus, for groups 2 and 3 together, it is assumed in this reference framework that about 5½-6½/1000 ought to be receiving geriatric care in hospital (irrespective of cost) and that about ½-1½/1000 may be accommodated in practice within a (cheaper) SSD residential home.

8.4 Groups 1 and 5 - those with behaviour disorders and either severely physically disabled (group 1) or moderately physically disabled (group 5).

The above arguments for group 2 and group 3 needing hospital care lead similarly for group 1 mostly needing psychogeriatric care in hospital. However, it may be that some members of the group with particularly caring 'own home' environments and with the support of a substantial domiciliary care package can be left in the community (where their lack of mobility stops them being a danger or nuisance to themselves and others). Group 1 is therefore assumed to require psychogeriatric care in hospital for some number approaching the 4/1000 estimated in table 5.1.

The study team has not been made aware of a widely accepted view for the care of group 5, those with behaviour disorders and with some mobility. Security to others would ideally preclude the normal SSD residential establishment; some could no doubt be supported in the community; yet others might be best in a specialist establishment for the elderly mentally infirm, possibly with separate arrangements for day and night care. Thus the claim of this group on NHS care is something less than the 5/1000 in the group, say up to 3/1000, with the remainder of the group in residential or domiciliary care.

8.5 The reference estimate compared to actual provision

Anticipating the discussion on the other highly dependent groups (groups 4,6 and 7) and indeed on the less dependent groups, there is no obvious reason consistent with value for money which is apparent to the study team why there ought to be claims from these groups on the highest cost resource - hospitals. Further discussion of groups 4,6 and 7 is included in chapter 9 on residential homes.

Summarising the argument so far for the reference framework produces the following:

Table 8.1 - Reference framework provisions /1000 (before crowding out of severely disabled - see below)

Group	Population estimate (Table 5.1)	In hospital	In residential home or community
1	4	4	-
2	3	1½ - 2½	½ - 1½
3	5	4	1
5	5	0 - 3	2 - 5
	17	9½ - 13½	3½ - 7½

However, reference to the results of the "Balance of Care" project at two local authorities offers the tentative suggestion that only 50% of long stay hospital beds are allocated to the severely disabled and 50% to the moderately and minor disabled. This suggests 'crowding out' of many of the severely disabled by the moderately disabled, including those with behaviour disorders. Because of this uncertainty in the actual allocation of hospital beds, the study team places no significance on the detailed group assignments in table 8.1, but only on the overall reference framework hospital provision.

Hospital beds provision nationally

How do these reference estimates compare with what is observed in practice nationally?

The implied DHSS guideline for the provision of long stay hospital care for the elderly is approximately 10 beds/1000. This is also the estimated national average provision. However, it should be noted that there are complications in the derivation of these and individual authority figures in respect of the number of long stay elderly patients in hospital since these patients may be accommodated in more than one hospital specialty. (Appendix 5 explains how, using the available data, estimates were made of the long stay hospital provision for the elderly).

.7 Conclusions - National

Thus, the study team's analysis of a reference framework leads towards the conclusions that:

1. The implied DHSS guideline and national average of 10 beds/1000 are within the reference framework of 9½ - 13½ beds/1000 and are therefore not inconsistent with value for money. (The guideline of 10 beds/1000 will be assumed in subsequent chapters to be consistent with a reasoned view on value for money).

2. There is some question as to whether the operation in practice of the process of allocating clients to hospital beds is consistent with a reasoned view on value for money, in particular for the severely disabled.

8.8 Provision in the four authorities

These conclusions, based necessarily on very tentative arguments and estimates, have to be compared with what is provided in the four authorities visited.

Table 8.2 - Estimated availability of long stay hospital beds for the elderly in the authorities visited (appendix 5)

Authority	Beds/1000 persons aged 65 or over
'A'	6
'B'	9½
'C'	7½
'D'	8

Whilst the study team has not attempted to obtain from health authorities any data concerning the characteristics of the patients in their care to facilitate the analysis of the allocation of beds by major group according to the level of dependency, it is evident that at least in authority 'A' there may be significant numbers of clients for whom a hospital place is likely to be desirable but for whom there is no bed available. The existence of these highly dependent clients necessarily places additional pressure on the social services departments, either in the residential establishments which may be required to accommodate them or, alternatively, on the community services which may be called upon to provide exceptional levels of support to these clients if they are required to remain in their own homes (as well as increasing pressure on any caring friends or relatives).

8.9 Conclusions - Four authorities

This argument leads to the conclusions that:

1. In authority 'A', services to the highly dependent or in support of their friends and relatives may be deficient through under-provision of hospital beds; the value of supplying any such deficiency compared to the cost, (possibly of the order of about £20,000 per annum per 1000 elderly in authority 'A') should be considered by local policy makers.

2. The combined expenditure on residential homes and community services should be expected to be higher in authorities such as authority 'A' than will be indicated by the reference framework (i.e. before correction for the hospital bed under-provision).

3. In authorities 'C' and 'D', services to the highly dependent or in support of their friends and relatives may be deficient through the possible under-provision of hospital beds. However, uncertainty concerning the effects of both age structure and the number of pensioners living alone (in authority 'C') and the possible misclassification of geriatric beds as short-stay (in authority 'D') mean that the provision in these two authorities may be within 20% (the possible variation in sub-group sizes given in appendix 2) of the lower end of the reference framework for hospital provision.

4. In authorities such as authority 'B', the provision of hospital beds is consistent with the reference framework.

5. The effect of hospital bed provision on the value for money of local authority services in the four authorities is small, and is taken account of in subsequent analysis by allowing for the estimated number of hospital beds provided.

9. RESIDENTIAL HOMES

9.1 Introduction

This chapter is concerned with the development of a reference framework for reviewing the value for money of providing what might be described as 'supervised accommodation' for those groups of elderly people who, for whatever reason, cannot be supported adequately within their own homes, but for whom the provision of hospital accommodation is not considered appropriate.

The 'supervised accommodation' most generally provided by local authorities consists of places in Part III residential homes (so called after the 1948 National Assistance Act). Some local authories, however, have begun to develop 'very sheltered' housing schemes incorporating a resident warden and with enhanced welfare and care facilities (often termed Part 2½ accommodation) as a partial alternative to such residential homes.

None of the four authorities visited provided such schemes at the time of the study team's visit (see table 13.1). The study team has not, therefore, explicitly considered Part 2½ accommodation.

Where the framework developed in this chapter refers to the provision of places in residential homes, it may therefore apply equally to the provision of places in 'very sheltered' housing schemes.

The extent to which 'very sheltered' housing might provide a better value for money alternative to Part III accommodation requires coverage in any further work.

Under the 1948 National Assistance Act all local authorities have a statutory obligation to provide residential accommodation for "persons who by reason of age, infirmity or any other circumstances are in need of care and attention which is not otherwise available to them". All authorities provide substantial amounts of such care. However the 1948 Act does not give guidance on how many persons will require residential accommodation, nor does it help directly in setting up a framework for estimating the numbers. To provide such a reference framework for reviewing the value for money of residential place provision, the discussion turns now to sub-groups whose members are assumed to require residential places.

2 Group 6 - moderate physical disability, little or no support from relatives or friends.

Because the members of this group can themselves perform the 'non postponable daily personal tasks' (e.g. getting a drink, going to the toilet) it is possible to envisage an intensive package of domiciliary care to carry out the physiological tasks which are beyond them. However, unless friends or relatives are involved in caring for them (group 7), it is difficult to be confident that a package of community care will ensure security (although the use of devices such as telephone alarm systems and visiting wardens will assist). Hence, the members of group 6 are candidates for residential care where, for a public sector cost comparable with the cost of the necessarily high intensity community option (including the service of a district nurse), but a local authority cost half as much again as the community option, security as well as adequate physiological achievement can be ensured. The view might also be taken that the very limited 'connectability' of members of this group with their local communities is replaced through the provision of a residential place by the perhaps greater 'connectability' and companionship with other residents of the home. The balance between the care to be provided by residential homes and by a community care package for this group is a matter for local policy and individual preference. The study team's assumed implication is a requirement for residential home places of something up to the 8/1000 estimated in table 5.1 to be in group 6. Provision of residential places for fewer than 8 members of this group per 1000 implies, in the reference framework, caring for the balance with intensive packages of domiciliary care.

It is assumed that the community option is better value for money for those with moderate physical disability, but with support available from friends or relatives - group 7 - and similarly for the remaining high dependency group - group 4.

9.3 Group 8 - minor physical disability,

(i) with dementia, or
(ii) more than one of the following disabilities:
- unable to perform any of the domestic tasks,
- incontinence, and
- inadequate housing

Little or no support from friends or relatives.

Of the less dependent groups, this appears in the four authorities to be the only group for which an adequate level of achievement along the physiological and security dimensions cannot be attained in practice with domiciliary services. Hence, for 'value' consideration, the members of this group are assumed in the reference framework to be in residential accommodation. Table 5.2 shows that the estimated size of the group is 6½/1000.

9.4 Other groups

Individuals with either not more than one complicating factor, or with supporting friends or relatives are assumed to receive best value if looked after in the community - groups 9 and 10. Individuals with one complicating factor require an intensive package of domiciliary care which, because of district nursing requirements, may cost the public sector more than the cost of residential care but is unlikely to cost the local authority more. Hence, on value for money grounds, members of all other groups are assumed to be generally better off in the community.

9.5 Reference framework residential requirement - Summary

In the context of the implied guideline provision of hospital beds - 10/1000, table 8.1 shows that, for the reference framework, between 3½ and 7½/1000 of groups 1,2,3 and 5 must be in residential homes or in the community.

Hence the argument so far leads to the following:

Table 9.1 - Reference framework provisions/1000

Degree of physical disability	Group	Population estimate in residential home and community	Reference framework	
			Residential	Community
Severely disabled or moderately disabled with behaviour disorder	1,2,3,5	3½-7½	2½-6½*	1-4
Moderately disabled	6	8	8	-
Minor	8	6½	6½	-
			17-21	

Note:

* 2-5 moderately disabled with behaviour disorder and ½-1½ severely disabled (being, from section 8.2, the maximum from groups 1, 2 and 3 that can be accommodated without undue disruption of a residential home's routine) giving a total of 2½-6½.

In the development of the reference framework residential requirement above, it has been assumed that the necessarily high intensity community option for sub-group 6 has a public sector cost comparable with that of residential care, based on the packages developed in chapter 6. (None of the four authorities visited provided specialised modes of care for the highly dependent such as 'very sheltered' housing - 'Part 2½' - or 'phased care' - whereby an elderly person alternates on a regular planned basis between residential and community care. The study team has not, therefore, costed these options nor obtained professional opinion as to their value).

In the reference framework, it has also been assumed that the proportion of the elderly with little or no support from friends or relatives (as developed in the sub-group analysis in appendix 2) could perhaps be reduced in an authority by the extent to which the authority can and does mobilise such support (for example by the promotion of neighbourhood care schemes). This would allow a corresponding reduction in the requirement for residential care. None of the authorities visited, however, formally promoted such schemes.

Finally, the reference framework does not take into account the utilisation of private and voluntary residential care by elderly people not financially supported by the local authority. There is some evidence in the four authorities to suggest, however, that such elderly people tend to be on average less dependent than those in residential care who are supported by the local authority, and with which the framework is essentially concerned.

9.6 The residential place national provision

The 1973 DHSS guideline for 1983 for the provision of residential accommodation by local authorities for the elderly (including accommodation provided by P & V agencies but paid for by local authorities) is 25 places/1000.

CIPFA national statistics show that in 1980-81, the average number of places available in SSDs or paid for by the SSDs in the private and voluntary sector, is approximately 17/1000.

9.7 Conclusion - National

It will be noticed that the reference framework estimate of 17-21/1000 includes the 1980-81 average provision of 17/1000 for England and Wales but that it is lower than the DHSS guideline for 1983 of 25/1000. The study team's conclusion is that the average provision is therefore consistent with a reasoned view on value for money, but the DHSS guideline seems at least 20% high.

9.8 The four authorities

In the authorities visited, the provision of residential places (including the utilisation of places in other local authorities and in the P & V sector), built up from authority records and not necessarily always the same as CIPFA figures, is:

Table 9.2 - Residential places provided by the authorities visited

Authority	Places/1000
'A'	23 (19 places in authority's own homes)
'B'	31 (19 places in authority's own homes)
'C'	15 (13 places in authority's own homes)
'D'	22 (21 places in authority's own homes)

Note:

The numbers of elderly people from the authorities visited who were accommodated in other local authorities' homes (OLAs) and, vice versa, were small in comparison with the total numbers of elderly people accommodated.

It will be recalled that the estimated long stay hospital provision in the four authorities (table 8.2), as compared with the implied guideline of 10 beds/1000, is as follows:-

Table 9.3. - Estimated availablity of long stay hospital beds for the elderly in the authorities visited

Authority	Beds/1000 persons aged 65 or over
'A'	6
'B'	9½
'C'	7½
'D'	8

Hence, in the authorities visited, for sub-groups 1,2,3 and 5 the population estimates for those in residential homes and the community are as follows:

Table 9.4 Sub-groups 1,2,3, and 5

Authority	Population estimate /1000 (table 8.1)	Long-stay hospital beds/1000 (table 9.3)	Population estimate in residential home and community
'A'	17	6	11
'B'	17	9½	7½
'C'	17	7½	9½
'D'	17	8	9

The argument so far has assumed constant prevalence of the different groups of the elderly. However, the degree of support from friends or relatives is one of the classification factors used to define these groups and this factor does in fact vary from authority to authority.

The group size estimates for the different authorities have therefore to be corrected to take account of variations in this factor. The percentage of pensioners living alone is an indicator of this variability (the inclusion of women aged 60-64 has little effect on the figures). From the 1971 national census, the percentage of pensioners living alone is as follows:

Table 9.5

Authority	% of pensioners living alone
'A'	26
'B'	36
'C'	23
'D'	32
National average	24

As shown in appendix 2 on the derivation of group sizes, this does not significantly alter the population estimates for those in residential homes and the community for groups 1, 2, 3 and 5, but alters the estimates for groups 6 and 8 as follows:

Table 9.6 Estimated Size (per 1000 elderly)

Authority	Group 6	Group 8	Total
'A'	8½	7	15½
'B'	9½	8	17½
'C'	8	6½	14½
'D'	9	7½	16½
Chapter 5 estimates	8	6½	14½

Hence the reference framework residential requirement in the four authorities becomes as follows:

Table 9.7

Authority	Reference framework residential requirement: Sub-groups 1, 2, 3 and 5 (table 9.1)(i)	Sub-groups 6 and 8 (table 9.6)	Total
'A'	2½ - 6½	15½	18 - 22
'B'	2½ - 6½	17½	20 - 24
'C'	2½ - 6½	14½	17 - 21
'D'	2½ - 6½	16½	19 - 23

Note (i) None of the authorities has a population estimate for those in sub-groups 1, 2, 3 and 5 in residential care and the community (table 9.4) of less than 6½/1000 and the top end of the reference framework for residential care (table 9.1) is 6½/1000, and given that none of sub-groups 1 and 2 are placed in the community (no authority has less hospital beds than the minimum required for sub-groups 1 and 2 combined).

The age distribution of the elderly will also affect the level of residential provision. The percentage of the elderly aged 75 and over in the four authorities was as follows:

Table 9.8

Authority	% elderly aged 75 and over
'A'	39
'B'	42
'C'	36
'D'	41
National average	38

As shown in appendix 2, these percentages modify the reference framework as follows:

Table 9.9

Authority	% change to reference framework for residential provision
'A'	+3
'B'	+8
'C'	-4
'D'	+7

Hence the residential provisions in the four authorities which would be consistent with the reasoned view on value for money presented in the reference framework would be as follows:

Table 9.10

Authority	Authority reference framework for residential provision (table 9.7)	Adjustment for % of elderly aged 75 or over (table 9.9)	Adjusted authority reference framework for residential provision
'A'	18 - 22	x 1.03	18½ - 22½
'B'	20 - 24	x 1.08	21½ - 26
'C'	17 - 21	x 0.96	16½ - 20
'D'	19 - 23	x 1.07	20½ - 24½

9.9 Conclusion - Provision in the four authorities:

On the basis of these reference frame arguments, and table 9.2, and in the context of actual hospital provision the study team is thus led to the following conclusions:

Authorities 'A' and 'D':

The number of residential places used by authority 'A' is ½/1000 more than the upper limit of the framework would suggest. This is less than 5% more, which is not significant in the context of uncertainty of the reference framework estimates. (It is interesting to note that authority 'A' has a policy of providing specialist residential accommodation for the elderly mentally infirm and therefore needs to provide at the upper limit of the reference framework range). Likewise, authority 'D's provision is consistent with the reference framework estimate. The requirement for community care in both these authorities, therefore, should be consistent with the reference framework.

Authority 'B':

The number of residential places used (including OLA and P & V sector) appears to be at least 5/1000 more than the reference framework would suggest. If the individuals in these extra places were in the community and served by intensive domiciliary care packages, there might be little change to the total public sector costs but there could be a major saving to this inner London authority of about £25 per week per person (the approximate difference in net revenue costs to an inner London authority between residential and intensive domiciliary care) or, say £7,000/1000 per annum in total. This saving must be set against the weight that local authority policy makers may attach to the value of lifting the burden of care from friends and relatives who are, nevertheless, able and willing to care. If they judge this help to friends and relatives is 'worth' £7,000/1000 per year, and if they do not attach special value to the elderly individual remaining in the community, then the additional residential provision would be consistent with local policy.

In fact the authority appears to have recognised that it is overprovided with residential places - it presently has a policy of placing only 5 people in P & V homes for every 6 discharged; it has reduced the number of places in one of its largest homes without replacement and is considering further reduction. If this home were to be closed completely and the P & V policy maintained for about 4 years, the reduction would amount to about 5/1000 which is, of course, the reference framework minimum estimate of surplus. (The consequences of such reduction on domiciliary care are reviewed in the following chapter.)

Authority 'C':

There appears to be a shortfall of perhaps 1-5/1000 residential places used by this metropolitan authority. This would imply that intensive domiciliary care packages would perhaps be needed in excess of the reference framework estimate. Providing these extra places would cost the public sector very little on balance but the additional net cost to the authority for residential rather than intensive domiciliary care would be about £15 per week per person (the approximate difference in net revenue costs to a metropolitan authority between residential and intensive domiciliary care) - plus capital charges - or, say £1,000-£4,000/1000 per annum.

However, there are grounds for believing that the particular social structure of the area served by authority 'C' may lead to rather more people than in the reference framework being willing to support their elderly friends or relatives; a 10% increase in the size of the supporting group would change the reasoned estimate to 15-19/1000. Hence, on balance, the study teams concludes that the residential provision in authority 'C' may well be consistent with a reasoned view on value for money.

Note:

A simplified method of performing an initial comparison of an authority's provision of residential accommodation with the reference framework estimate consistent with value for money is set out in appendix 10.

9.10 The allocation of clients to residential places

The discussion so far has addressed the question of whether the number of residential places used by an authority is consistent with a reasoned view on value for money. It is on this basis, and in the context of existing hospital use, that the conclusion has been suggested with regard to the number of residential places used that authorities 'A' and 'D' and perhaps authority 'C' are about right, and authority 'B' is currently over-provided. However, the question has now to be asked as to whether the SSD allocation of clients to the existing places is consistent with a reasoned view on value for money.

The study team found that data concerning the characteristics of residents in local authority homes is generally not readily available, especially in any detail that would facilitate the analysis of the allocation of places by major group according to the level of dependency. However, in connection with another study, a survey had been undertaken recently by two of the authorities visited by the study team (authorities 'A' and 'D'); the surveys included data facilitating some relevant analysis for residents in the authorities' own establishments (figures translated to per 1000 persons aged 65 or over):

Table 9.12 - Characteristics of elderly people accommodated in residential homes(/1000)

Characteristics (i)	Authority 'A'		Authority 'D'	
Severely disabled:				
- with behaviour disorders	1		½	
- other	3		1½	
		4		2
Moderately disabled:				
- with behaviour disorders	1½		1½	
- other	3½		2½	
		5		4
Total highly dependent		9		6
Others - not highly dependent (ii)		10		15
Total provision		19		21

Notes:

(i) The elderly people in the surveys were grouped as follows:

Physical disability

Severe-

i) "bedfast" or
ii) "mobile in wheelchair only" or
iii) "cannot feed self (after food cut up)".

Moderate - not above but unable to perform one or both of-

i) "wash hands and face", and
ii) "dress (apart from buttons and zips)".

Mental state

Behaviour disorder-

i) is a "major nuisance" or
ii) is a "minor nuisance" and has "severe confusion (including deterioration of personality or habits)".

(ii) Less than ½ of those in either authority who were not highly dependent were unable to use the W.C. without help.

The following table presents a comparison of the above characteristics of the elderly in residential homes in authorities 'A' and 'D' with the reference framework requirement for residential place provision in the context of 10 hospital beds/1000 (from table 9.1):

Table 9.13 - Comparison of characteristics of elderly people accommodated in residential homes with reference framework

	Ref framework DHSS 10	'A' DHSS 6	'D' DHSS 8
Severely disabled and those with behaviour disorders	2½ - 6½	5½	3½
Other moderate disabled (including, say, 25% of places in OLA and P & V)	8	4½	2½
Others not highly dependent (including, say 75% of places in OLA and P & V)	6½	13	16
	17 - 21	23	22

Assuming limitations on the number of severely disabled and behaviour disordered that can be coped with in local authority residential homes, the allocation of residential places in authorities 'A' and 'D' to this group is broadly consistent with the reference framework, even in the context of the DHSS provision. However, the allocations to the other moderately disabled and to the less dependent are in practice very different from what has been assumed in the reference framework for achieving a reasoned view of value for money.

The study team observed four factors that may contribute to misallocation.

First, as shown in table 9.14, there appear to be significant numbers of applicants for residential places in the authorities who are not receiving community services.

Table 9.14 - % of adjusted residential waiting list receiving community services

	Home help and/or meals-on-wheels	Day centre	Neither
'A'	34	*	*
'B'	67	0	33
'C'	60	15	30
'D'	62	21	28

* Analysis not conducted

It was also observed that formal mechanisms for the officers responsible for the residential waiting list to ensure that information about applicants is communicated to the community services management existed in authority 'B', but did not appear to exist in the other three authorities. However, authority 'B' is a low spender on community services (see section 10.7 on home help) and may have the greatest difficulty in releasing community services to these clients. Thus the first factor that could be contributing to misallocation may be a correctable communication problem.

The schematic in appendix 1 illustrates the possibility that pressures for maintaining a relatively harmonious and easy-to-maintain group in residential homes may operate against the interests of the more highly dependent applicants and therefore, unless the allocation process is subject to effective top-down control, there may be some tendency for some of the more highly dependent to be crowded-out by the less dependent. The study team did not find centrally available up-to-date information on the disability characteristics of residents and applicants nor did they find agreed admission criteria widely used in any of the authorities. This lack of information and of criteria could lead to a weakness in control of allocation.

Furthermore, authority 'D' provides approximately one half of its residential accommodation in adapted homes which do not have such good facilities as the purpose-built homes; because it is difficult to fill some of their places with high dependency clients, there may be some tendency for authority 'D' to maintain high occupancy rates by taking in people who could remain in the community - thus detracting from overall value for money.

9.11 Conclusions - Allocation in four authorities

The study team concludes that on the basis of their estimates, while the provision of the total number of residential places in authorities 'A' and 'D' is consistent with the reference framework estimates:

1. Many of the moderately disabled are receiving less than a reasoned view of the value they should be receiving and are either incurring a heavy demand on the domiciliary services or are not receiving adequate support.

2. Many of the less dependent, who could be supported so that they could enjoy the benefits of living in the community appear in fact to be allocated to residential homes; they incur more cost than the relatively lower cost of the domiciliary care that would keep them in the community.

3. The criteria for admission to residential homes and the procedures for applying them should be examined.

4. The long term consequences on value for money of replacing residential homes which have inappropriate facilities by purpose-built homes should be examined.

.2 Economy and efficiency in the provision of residential care in local authorities' own homes

Analysis of the gross cost incurred, per resident week, in the provision of residential care in the local authorities' own homes indicates the following:-

Table 9.15 - Cost per resident week of residential care

	Authority			
	'A'	'B'	'C'	'D'
Gross cost per resident week (incl. debt charges)	£104.1	£105.6	£69.9	£74.8
Net cost per resident week (incl. debt charges)	£ 79.7	£ 76.5	£43.8	£49.4
Percentage of gross cost on:				
- salaries and wages	71	68	68	71
- premises	14	12	15	14
- supplies and services	8	11	10	10
- debt charges	6	8	6	4
- other (net of misc. income)	1	1	1	1
	100	100	100	100

The study team has not performed a detailed analysis of the reasons for the differences in gross and net costs of residential accommodation, (this has been done in another study for the District Audit Service which may be published in due course) however, the above figures suggest that:

- major differences in gross cost per resident week exist between types of authorities rather than between authorities of one type; gross costs per resident week in the inner London authorities 'A' and 'B' are, on average, 40-50% higher across all expenditure headings;

- the differences are not introduced as a result of differences in occupancy; occupancy levels are similar in all of the authorities visited;

- the largest part of the differences is accounted for by the generally higher level of costs in the inner London authorites;

- the largest factor in the difference in gross cost between types of authorities is employee costs - the differences between the average gross costs for each type of authority amounts to approximately £22 per resident week - inner London authorities costs are almost 45% higher; (the study team has not analysed the extent to which this may be due to London weighting, to generally higher staffing levels or to the grades of staff employed);

- there is some difference between the authorities in the average income per resident week from charges to clients; the rate of charges is set nationally and variations will exist to the extent that residents have funds available over and above a state pension; from data available, the range in average income per resident week in the authorities visited is approximately £25-£29.

10. HOME HELPS

10.1 Their importance to value for money

More money is spent by local authorities on the elderly in England and Wales through the home help service than through any other community based service. Data available from CIPFA Personal Social Services Statistics (1980-81 actuals) suggests that national expenditure on home helps accounts for (approximately) 70% of SSD net expenditure on community-based services for the elderly and 30% of total SSD net expenditure on the elderly (both figures excluding any allocation of the 20% of total SSD net expenditure on administration and fieldwork). It accounts for about 11% of SSD net expenditure in total.

In the four authorities 'A', 'B', 'C' and 'D', net expenditure on home help in 1980-81 varied between 21% and 54% of the total SSD net expenditure on the elderly, and net annual expenditure per person aged 65 or over varied between £28 and £61.

Hence, on expenditure grounds alone, the home help service is a major contributor to the value for money of SSD services to the elderly, and to differences in value for money between authorities.

The contribution of home helps to the value of SSD services is also major; it is different in different authorities. Their contribution to value may be appreciated by considering the roles they may undertake in relation to the elderly:

- they make it possible for many of the elderly to remain in the community rather than incurring the greater cost and, possibly, lesser value of having to move into residential homes or hospital;
- they can improve the 'quality of life' of their elderly clients;
- they can improve the 'quality of life' of those friends and relatives of the elderly in the community who would otherwise have a heavier burden of carrying out care tasks.

The tasks which home helps carry out in the performance of these roles are many and various. They include, for example:

- shopping, collecting pension, paying rent and bills, writing letters,
- heavy and light household cleaning, washing and ironing (including dealing with the results of incontinence), making beds,
- preparing meals, washing dishes,
- monitoring a client's condition.

Variations in the philosophy behind their roles are sometimes indicated by designations such as 'home care workers' in place of the more usual 'home helps'. The tasks sometimes extend to assisting with personal tasks:

- assisting a client to eat and drink,
- getting a client up, dressing, putting to bed,
- washing and bathing,

though in many cases the more personal tasks, expecially bathing, are carried out by the district nursing service or in day centres.

The greater scope of these activities is recognised in one of the authorities visited by the designation of specialised home helps as "community care assistants".

The contribution of these tasks to value will be to a greater or lesser extent along all the dimensions of achievement, either directly on:

- physiological/personal care - e.g. getting up, washing, dressing putting to bed,
- physiological/nutrition - e.g. shopping, preparing meals, assisting with eating and drinking,
- physiological/environment - e.g. shopping, collecting pension, paying bills, washing up, heavy and light household cleaning,
- security - e.g. visits to monitor a client's condition,

or as an essential component of a package of community care also including district nursing, day care, meals, and short term residential care.

The extent of the contribution to value - and the effectiveness of home helps - will depend on the particular needs of a particular client; on the duration and frequency of home help visits; on the effectiveness of the work which is carried out in the visits; and on the value given in local policy to achievement along the different dimensions.

The cost of home help care - and the efficiency of home helps - will depend on the proportion of time spent in contact with the client rather than in travelling or administration or lost time (for example, because of the way in which a guaranteed working week scheme may be operated); on wage costs; and on travelling expenses.

Thus it will be readily appreciated that the job of operating a home help service effectively is complex, and open to a wide variety of valid interpretations of what constitutes effectiveness.

It is not, therefore, surprising that the study team found variety in expenditure and performance. It is the aim of the rest of this chapter to seek to identify how much of the variety is a function, first, of the availability and use of the more expensive resources - hospitals and residential homes; second, and more importantly, through comparisons, to present factors for consideration locally which may offer opportunity for increasing value for money.

The important matter of how much of the variety in expenditure and performance of home helps is associated with the availiability of other methods of care, in particular day centres, meals and district nursing is postponed until chapter 14 on the co-ordination of services.

10.2 The numbers of home helps provided

The 1980/81 provision of full time equivalent (FTE) home helps/1000 elderly in the four authorities, built up from authority records and not necessarily always the same as CIPFA figures, is:

Table 10.1 - The provision of home helps

Authority	FTE home helps/1000
'A'	13.2
'B'	5.8
'C'	15.8
'D'	7.4

Reasons for the very wide range of ± 50%, or of the differences from the DHSS guideline of 12 FTE/1000 could relate to differences between the authorities in:

- help provided to other client groups (e.g. families, young physically handicapped),
- demography,
- hospital and residential provision,
- private sector care.

Reasons could also relate to issues of effectiveness:

- average time spent with various categories of client,
- coverage of the target population, i.e. the percentage of each group of the elderly who receive home-help,
- co-ordination with the other elements of community care: district nurse, day centre, meals, short term residential,
- frequency of visit.

Furthermore, a reason could relate to an efficiency issue:

- productivity, i.e. contact hours per home help.

Each of these possibilities, except co-ordination and frequency, is considered in the following sections. Co-ordination and frequency, and different methods of operating the home help service are considered in chapter 14 after the other resources have been reviewed.

Subsequent sections of this chapter consider other efficiency issues relating to differences in costs per contact hour.

10.3 The effects of help provided to other client groups (e.g. families and the young physically handicapped)

The percentage of home help hours devoted to the elderly was presented by the authorities as:

Table 10.2 - Percentage of home help hours devoted to the elderly

Authority	% hours devoted to the elderly
'A'	86%
'B'	87%
'C'	94%
'D'	96%

10.4 The effect of age structure

Assessment of the numbers of home helps provided should relate to numbers and categories of elderly people. These numbers and categories of elderly people are affected by the demographic structure of the population.

The percentages of the elderly aged 75 and above in the four authorities were:

Table 10.3 - Percentage of elderly aged 75 and over

Authority	% elderly aged 75 and over
'A'	39
'B'	42
'C'	36
'D'	41
National average	38

As shown in appendix 2, these percentages imply that, compared to the amount of home help at an equivalent rate that would have to be supplied in an authority with the national average percentage of people aged 75 or over, the amount of home help supplied by the authorities would have to be approximately:

'A'	2% more
'B'	5% more
'C'	3% less
'D'	5% more

10.5 The effects of hospital and residential provision on home help requirements

Assessment of the numbers of home helps provided should relate to the numbers and categories of elderly people who are neither in hospital nor in residential homes.

The analysis in the previous chapters indicated that, as compared to authorities 'A' and 'D', authority 'B' has about 9/1000 fewer in the community who require community care and authority 'C' about 4/1000 more (after allowing for the proportion of elderly aged 75 or over).

Anticipating the findings shown in table 10.6 and taking an approximate estimate of home help time per client per week as 3½ hours, indicates that the requirements relative to authorities 'A' and 'D' of home help time in contact with clients would be:

- for authority 'B', 31½ hours/week/1000 elderly fewer
- for authority 'C', 14 hours/week/1000 elderly more

Since a home help FTE provides about 30 hours per week contact time, this implies that authority 'B' would operate at the same scale as authorities 'A' and 'D' with about 1 FTE/1000 fewer, and authority 'C' with ½ FTE/1000 more.

10.6 The levels of home help provided for equivalent populations

Modifying the existing provision of FTE home helps in the four authorities (table 10.1) for the effects of help provided to other client groups, demography and hospital and residential provision (sections 10.3-10.5) results in the following estimated provision in the four authorities for equivalent populations.

Table 10.4 - Estimated FTE home helps/1000 devoted to the elderly adjusted for demography and hospital/residential provision

	FTE/1000	Other client groups	Demography	Hospital/ residential	Adjusted FTE/1000
'A'	13.2	x o.86	÷ 1.02	-	11.1
'B'	5.8	x o.87	÷ 1.05	+ 1	5.8
'C'	15.8	x o.94	÷ 0.97	- ½	14.8
'D'	7.4	x o.96	÷ 1.05	-	6.8

The differences in provision between the authorities are thus reduced by the above three corrections but are still considerable; these differences are analysed in the rest of this chapter, and the differences are also analysed in the context of the provision of other types of domiciliary care in Chapter 14.

Effectiveness issues: Differences between authorities in the allocation of home help to different groups of elderly clients

.7 Effectiveness: Differences in distribution of home help time

The study team carried out an analysis of time sheets for one week in each authority. The results are shown in Exhibits 10.1 and 10.2. It will be seen that there are large differences between authorities in the distributions of home helps per client by percentage of clients, and also by percentage of total home help provision.

This observation suggests that the methods and criteria for allocating available time to clients are producing quite different results in the authorities. What can be said about which of these distributions - and, therefore, which allocation methods and criteria - are more consistent with achieving value for money? Sections 10.8 - 10.10 address these questions.

To assist in answering these questions, the study team arranged for questionnaires to be completed for a sample of home help clients in each authority; these questionnaires produced information on the characteristics of, and service offered to, clients.

To analyse the home help allocations, the study team has had to assign each of the 10 sub-groups of the elderly into four 'combination groups'. These combination groups have been formed, first, on the basis of whether the characteristics of a sub-group are such that at least some home help is necessary and, secondly, on the amount of time that the four authorities tend to give those members of a group who do receive any home help time - as revealed in the questionnaire survey of home help clients which the team conducted (see appendix 6).

The combination groups have been defined as follows-

Table 10.5 - Combination groups, based on sub-group characteristics and average allocation of home help hours (appendix 6)

Combination Group	Sub-Groups	Characteristics
I	1,2,5,6	Severe/moderate disability (require personal care), little or no support
II	3,4,7	Severe/moderate disability, with support
III	8,9	Minor disability, little or no support
IV	10	Minor disability, with support or with no specific physical disability

10.8 Value for money and service level differentiation between different groups of elderly clients

If the allocation of a particular total amount of home help capacity is to be such as to maximise the total value for money obtained, then the study team argues that, of those clients receiving home help, differentiation between what each receives should be such that, by and large:

- a higher level of physical disability should tend to lead to a larger allocation of home help hours;

- support from friends and relatives should tend to lower the average number of hours allocated to the more highly dependent - if they are covered at all - but in the case of the less dependent should affect mainly the coverage rather than the average number of hours allocated.

In terms of the combinations groups, this argument should imply that for any authority, having regard to home help hours but having, at this stage of the argument, no regard to other forms of care:

- the average number of hours allocated to combination group I (sub-groups 1,2,5 and 6) should be larger than the average for group II (sub-groups 3,4, and 7); in which case support affects the average time;

- the average number of hours allocated to combination group I should be much larger than the average for group III (sub-groups 8 and 9); in which case dependency affects the average;

- the average number of hours allocated to combination group III should be larger than the average for group IV (sub-group 10); in which case support and/or dependency affects the average.

10.9 Differences in average allocation between clients with different characteristics

Analysis of the results of the surveys in fact produces the following table which shows the average number of hours home help per week per individual who receives home help, for each combination group.

Table 10.6 - Average home help hours received by individuals receiving home help in each combinaton group (appendix 6)

Combination Group	Number of hours			
	'A'	'B'	'C'	'D'
I	5.4	8.1	6.5	8.8
II	3.4	7.0	5.3	$\boxed{7.8}$
III	2.8	3.1	4.7	4.9
IV	2.4	2.7	4.1	3.1
Average	2.7	3.4	4.6	3.4

Notes:

(i) The layout of the table represents the relationships that exist between the combination groups in terms of levels of support received from friends or relatives and of levels of dependency, as follows:

- individuals in CG II receive more support than those in CG I
- individuals in CG III are less dependent than those in CG I
- individuals in CG IV are less dependent than those in CG III

(ii) The figure in a box indicates that the sample contained too few individuals for confidence in the estimate.

(iii) Authority 'D' runs a visiting warden scheme (exhibited in figures 10.1 and 10.2); the average weekly client contact time is less than a ½ hour.

10.10 Conclusions on differentiation of service levels of home help (without regard to co-ordination with other services)

Examination of table 10.6 suggests that:

Authority 'A' - differentiates between both levels of support and of dependency: consistent with achieving value for money.

Authority 'B' - differentiates greatly between levels of dependency but, for the average offered to those who actually receive home help does not differentiate greatly between levels of support: consistent with achieving value for money in relation to dependency; but, in relation to support, fully consistent with achieving value for money only if it can be shown that home help contributes to co-ordinated packages of care which are effectively differentiated according to support (as will be shown in Chapter 14 is probably the case).

Authority 'C' - differentiates only slightly between both levels of dependency and of support: partly consistent with achieving value for money, but with the caveat on co-ordination as for authority 'B' above.

Authority 'D' - no conclusions on home help alone can be drawn from the available data on the effects of support but there does appear to be differentiation between levels of dependency. It is important to note that the visiting warden scheme makes it possible to give the minimal care necessary to improve 'security' using a relatively small share of resource.

10.11 Effectiveness: Differences between authorities in the coverage of different groups of elderly clients by home helps

By dividing the FTE home helps/1000 shown in table 10.1 by the average amounts of time per client shown in table 10.6, it is clear that the coverage of clients in the community by home helps is very different for the different authorities. The question now has to be addressed of how the coverage varies for different groups of the elderly. Hence the important question will be approached of whether there are groups - particularly in the low spending authorities - where coverage is so low that there must be people who are below what must be assumed to be minimum standards of care unless modes of care other than home help are filling the gap.

Unfortunately it is not possible to determine the coverage by each authority of each combination group separately using the data available to, or collected by, the study team. The surveys performed by the study team covered people receiving home help; the data available from the surveys in authorities 'A' and 'D' covered characteristics of people in residential homes. However, data is not available for this study on the numbers of people in each combination group in hospital in each of the authorities, nor for authorities 'B' and 'C' in residential homes. Without this data the reference framework method is too inaccurate to obtain useful coverage figures especially for the small but important high dependency groups. Insights on coverage figures for each combination group separately must therefore wait until any wider surveys are performed.

However, significant insights on coverage can be obtained for aggregate 'high public sector dependency' and 'low public sector dependency' groups; the 'high public sector dependency' group contains all of the highly dependent elderly, and also the less dependent elderly who do not have the support of friends or relatives; the 'low public sector dependency' group contains the remainder.

Appendix 7 derives coverage figures for such groups. The analysis is based on data from the home help surveys which were carried out in the four authorities, and it takes account of their differences in provision of hospital and residential places.

Appendix 7 shows that the percentages of elderly in the community who are covered by home help are approximately as follows:

Table 10.7 - Home help coverage percentage of elderly outside hospital and residential homes

	Authority			
	'A'	'B'	'C'	'D'
	%	%	%	%
Highly dependent individuals and less dependent individuals without support from friends or relatives: 'high public sector dependency' combination groups I, II and III	100	30(i)	85	10
Low dependency individuals with support and individuals with no specific physical disability: 'low public sector dependency' combination group IV	8	3(i)	8	9
All individuals in community	15	5(i)	13	9(ii)

Notes:

(i) The coverage of each of the above groups in authority 'B' may, however, be somewhat larger because its particular socio-economic factors could tend to reduce the requirement for local authority support as a result of the numbers of elderly people who may be in a position to take advantage of home help from private sources. Data available on the levels of home help provided by area suggests that in the one area which exhibits socio-economic factors closer to those of the other authorities than to the other areas in authority 'B', the number of FTE home helps/1000 is approximately 50% higher than for the authority as a whole. It may be, therefore, that without the utilisation of private home help in authority 'B', the authority itself would need to provide additional home help to a maximum extent of 50% of its current provision. Thus, because of particular socio-economic factors, the provision of home help by authority 'B' may effectively support the coverage of 45% of the 'high public sector dependency' group and 4½% of the 'low public sector dependency' group.

(ii) Coverage is increased by visiting wardens who give security to a further 3%.

Whether or not the low coverage figures for the 'high public sector dependency' group in authorities 'B' and 'D' are a realistic representation of what is actually happening in authorities 'B' and 'D' in respect of home help provided by the local authority is clearly of great importance to the conclusions that can be drawn.

Three possible sources of error are apparent to the study team:

(i) estimates of the number of elderly in an authority - (if overestimated, all the coverage percentages would be underestimated);

(ii) estimates of the net use of hospital beds in another authority and of the number of people from the authority's area in P&V residential homes but on whose behalf contributions are not made by the authority - (a net positive figure for the sum of these two quantities would imply an overestimate for the number of people in the community and hence the 'high public sector dependency' coverage would be underestimated);

(iii) misclassification of sampled clients into sub-group (underestimation of coverage of the 'high public sector dependency' group would result from classifying sampled people with minor disability as having support from friends and relatives whereas they actually have no effective support, and from classifying sampled people as having no physical disability whereas they actually have minor disability).

The study team is unaware of any factor from (i) and (ii) which is sufficiently significant to affect the conclusions; there is a large non-NHS hospital for the elderly in authority 'B' but this accounts for only about 2% over-estimate in the relevant elderly population.

However, (iii) remains a possibility. While the survey was conducted by the same people in the same way in all the authorities, it remains a possibility that home help organisers in authorities 'B' and 'D' misinterpreted the requirements of the survey or did not have the knowledge on which to provide sound answers (in which case, of course, it would seem to be unlikely that their actual allocation of time took effective account of actual characteristics).

For the sake of understanding the consequences of any such misclassification in authorities 'B' and 'D', suppose that even as many as half of the people classified as 'low public sector dependency' should in fact have been in the 'high public sector dependency' group. Then the coverage percentages would be:

Table 10.8 - Coverage after adjusting for possible misclassification

	Authority	
	'B'	'D'
'High public sector dependency'	50%	65%
'Low public sector dependency'	1½%	4½%

Note: By taking account of the exceptional socio-economic factors present in authority 'B', it would therefore be possible to suggest that the coverage, after adjusting for the possible misclassification described above, might approach 75% for the 'high public sector dependency' group and 2½% of the 'low public sector dependency' group.

The study team doubts whether such a large error occurred, but it should be borne in mind in reading section 10.12 and chapter 14 that the conclusions are subject to the assumption that there was no such error.

Before drawing conclusions on coverage, it is useful first to estimate how much home help resource goes to the 'high public sector dependency' and 'low public sector dependency' group.

Combining the coverage analysis and an analysis of average time allocations produces the following estimates of the percentage of each authority's home help resource devoted to the 'high' and 'low public sector dependency' groups:

Table 10.9 - Percentage of total home help allocated to groups

	Authority			
	'A'	'B'	'C'	'D'
	%	%	%	%
'High public sector dependency'	55	58	49	16
'Low public sector dependency'	45	42	51	84

10.12 Conclusions on coverage (table 10.8)

1. It is a matter for judgement based on local policy as to whether value for money is improved by giving home help to a large proportion of a group of people in the community; or to a smaller proportion but with a larger average amount of home help time: or to a smaller proportion with the same average amount of time and hence at less expense.

2. The differences in coverage between the authorities are large and indicate very different policies.

3. As is to be expected, for the 'high public sector dependency' group the home help coverage percentage is greater than for the 'low public sector dependency' group. For authorities 'A', 'B' and 'C' the coverage percentage is about ten times greater for the 'high public sector dependency' group than for the 'low public sector dependency' group; for authority 'D' the percentage for the 'high public sector dependency' group appears to be only approximately the same as that for the 'low public sector dependency' group. For authority 'B' and particularly for authority 'D' there is a very low coverage of the group which nevertheless may be expected to have a very high need for help of some sort. The interpretation of the low coverage percentages has to be made in the context of the provision of other methods of care - this is the subject of chapter 14.

4. The coverage of the 'low public sector dependency' group by local authority home helps in each of authorities 'A', 'C' and 'D' is about three times as high as in authority 'B'. Even allowing for the maximum effect of the exceptional socio-economic factors, and the availability of private sector home help in authority 'B' (which could tend to reduce the requirement for local authority support), authorities 'A', 'C' and 'D' still provide home help to cover approximately twice as many of the 'low public sector dependency' group as authority 'B'. This additional coverage amounts to approximately 4% of the 'low public sector dependency' group and accounts for at least 20% of the total home help budget in authorities 'A' and 'C', and at least 40% of the total home help budget in authority 'D'. Whether this is consistent with value for money is a matter for judgement; in authorities 'A' and 'C' this appears to be related to a policy based on the view of their practitioners that providing care to the less dependent is important in inhibiting the rate of physical and mental deterioration. No evidence of the accuracy of this view was presented to the study team; the truth or otherwise of this view is of course very important to an assessment of value for money.

Further conclusions on coverage, particularly of the low coverage in authorities 'B' and 'D' for the 'high public sector dependency' group, are postponed until chapter 14. Likewise, differences in the method of operating the service are postponed until then.

10.13 Economy and efficiency in the provision of home help

The output of the home help service can be measured in terms of the number of contact hours provided - i.e., the number of home help hours actually spent with clients or working in their homes or, for example, going shopping for them.

In order to provide these contact hours, social services departments incur expenditure on

- the salaries and overheads of home help organisers/supervisors.
- the wages and overheads of home helps themselves.
- travel and other expenses.

Differences between authorities in the gross unit cost associated with the provision of home help (the gross cost per contact hour) reflect differences in economy (e.g. the cost incurred to employ an organiser or home help) and differences in efficiency (e.g. the number of organisers or home helps employed in order to provide the contact hours required). Differences in the net unit cost per contact hour also reflect the extent to which clients are charged for home help provided (or income is available from, for example, joint finance).

Summarising an analysis of the differences in costs incurred per contact hour in 1980-81 presented in appendix 8, the differences between authorities 'B', 'C' and 'D' are as follows:

Table 10.10 - Analysis of differences between pairs of authorities in cost per contact hour of home help

Authorities compared	'B'&'D'	'B'&'C'	'D'&'C'
Gross cost (higher of authorities compared)	£3.40('B')	£3.40('B')	£2.47('D')
The effect of differences in economy			
(i) cost per FTE supervisor; 'B' higher than 'C' higher than 'D'	(0.14)	(0.11)	0.01
(ii) cost per FTE home help; 'B' higher than 'C' marginally higher than 'D'	(0.57)	(0.56)	0.01
Total economy difference	(0.71)	(0.67)	0.02
The effect of differences in efficiency			
(i) ratio of supervisors: home helps; 'D' higher than 'B' higher than 'C'	0.05	(0.07)	(0.10)
(ii) contact hours per home help (FTE); 'C' marginally higher than 'D' higher than 'B'	(0.28)	(0.28)	-
Total efficiency difference	(0.23)	(0.35)	(0.10)
Differences in other expenses			
(i) 'D' higher than 'B' higher than 'C'	0.01	(0.03)	(0.04)
Gross cost (lower of authorities compared)	£2.47('D')	£2.35('C')	£2.35('C')

Note:

No direct comparison including inner London authority 'A' is presented since data on supervisor costs was not available; however, information available shows that:

- the ratio of supervisors: home helps is lower than in authority 'D' but higher than in authorities 'B' and 'C'
- the cost per FTE home help is similar to authority 'B'
- the productivity of each FTE home help is only marginally higher than authority 'B' and below that of authorities 'C' and 'D'.

Whilst 60-70% of the difference in cost between inner London authority 'B' and metropolitan authorities 'C' and 'D' arises from higher expenditure incurred in employing each FTE supervisor/home help in inner London authority 'B' (e.g. London weighting), the majority of the remaining difference is explained by the lower 'productivity' of authority 'B' home helps who, on average, deliver almost 10% fewer contact hours per 40 hour week than authorities 'C' and 'D'; this is almost totally due to travelling time which is reduced in authority 'C' by the effect of providing home help in blocks of 3 hours and in authority 'D' by the effect of providing home helps in small 'patches'.

The study team concludes that authority 'B' (and to a lesser extent authority 'A') should consider the extent to which methods such as a patch-based method of allocation might by developed to reduce the amount of time spent by home helps in travelling between clients below the current level of 9% (6% in authority 'A'), and hence improve productivity, provided this can be done without losing the flexibility provided through having larger groups of home helps (e.g. the ability to provide cover if home helps are absent).

Income per contact hour is highest in authority 'D' which makes a weekly charge to all clients, lower but similar in authorities 'B' and 'C' which make a means-tested charge per hour and nil in authority 'A' which makes no charge.

Looking ahead to the conclusions in chapter 14 on the co-ordination of services which suggest that both authorities 'B' and 'D' must effectively provide a higher level of control than authorities 'A' and 'C' (which have considerably more home help resources), it is interesting to note that in inner London authority 'B' this function is performed by a small number of comparatively highly paid supervisors whilst in metropolitan authority 'D' it is performed by a much larger number of comparatively lower paid supervisors; the relative merits of these alternatives are worth reviewing by authorities.

11. DAY CARE

11.1 The service

Social services departments provide day care to individuals in a very wide range of forms both at purpose-built day centres and within residential homes. This provision has been steadily increasing in recent years; in 1975 there were 11,000 and 6,300 places available in centres and homes respectively and in 1980 the provision had risen to 20,000 and 7,200 places.

The net expenditure on day care (including lunch clubs) was £26 million - 4% of the expenditure on the elderly (excluding fieldwork and administration costs, CIPFA 1980-81 actuals).

Day care nearly always includes the provision of a meal and a place for meeting fellow clients, but there is variation in the extent to which it includes various social activities and personal care facilities - which may range from hairdressing to bathing.

Thus, day care affects the following dimensions of achievement:

- physiological,
    - hygiene
    - nutrition
- connectability,

and, to some extent, security, when transport is arranged.

The use made of day care places and the extent of their allocation to the highly dependent is affected by the availability of SSD transport; which also has an important effect on the efficiency of the whole operation.

11.2 Data

The data available to the study team covered day care provision in total and - for those who also receive home help - the survey data covered the characteristics of recipients. The data is not sufficient, however, to provide the basis for analysis of the levels of provision and coverage for sub-groups of the elderly separately.

11.3 Effectiveness: Coverage

The proportions of the elderly in the community who receive day care with transport are as follows:

Table 11.1 - Day care with transport

Authority	Recipients/1000 in community	Places/1000 in community
'A'	10	4
'B'	6	3
'C'	7	3
'D'	10	2

However, elderly people for whom the provision of day care with transport might be considered particularly appropriate - e.g. the severely disabled without support (sub-group 2) and the moderately disabled without support (sub-group 6) - are not in the community. Within the context of the reference framework for residential care, therefore, the provision of day care depends almost entirely on the local view taken as to its value (e.g. in terms of providing relief for caring friends or relatives) in relation to its net cost of about £8 per visit.

Thus, whether more or less provision is consistent with value for money must depend on local judgement.

In addition to the provision of day care with transport, some authorities, particularly authority 'A', also make the facilities of day centres available to, or provide separate centres for the relatively able-bodied elderly who do not require transporting.

The value of day care without transport lies in its contribution to the 'connectability' of those who are mobile, and to 'nutrition'.

Of the four authorities visited, only authority 'A' provides a substantial amount of day care without transport, at a net cost of approximately £10,000/1000 per annum.

Whether the provision of day care without transport is consistent with value for money is a matter for local judgement.

11.4 Effectiveness: Frequency of visit

The proportions of transported day care recipients who attend four or five times a week is as follows:

Table 11.2 - % of transported day care clients who attend at least four times a week

Authority	%
'A'	0*
'B'	20
'C'	16
'D'	2

Note: * based on the study team's understanding that attendance is usually limited to one or two days a week as transport is seen as a scarce and expensive resource.

Compared with authorities 'A' and 'D', the relatively high proportion of clients receiving 4 or 5 visits/week in authority 'C' is consistent with a need to provide intensive domiciliary packages to those who, in other authorities, might be expected to be in residential care. The relatively high proportion in authority 'B' is consistent with a need for service to compensate for the relatively low level of home help.

11.5 Effectiveness: Facilities provided

The value of day care to clients must vary not only with the frequency of visit, but also with the facilities provided. The different authorities provide facilities as follows:

Table 11.3 - Day care facilities

Type of Facility	Authority 'A'	 'B'	 'C'	 'D'
Intensive	✓	✓	✓	✓
Activities for handicapped	(specialised) ✓	✓	✓	
Social activities	✓		✓	
Drop-in centre	✓	✓		

The variations in provision and frequency make the study team question whether all authorities have defined the objectives of providing day care with sufficient precision.

11.6 Efficiency: Transport

A major part (25-75% in the four authorities) of the cost of day care is incurred by transporting clients to and from the centres.

Clients attending day centres usually arrive before 10 a.m. and leave some time after 4 p.m. Thus, the demand for transport for day care tends to be concentrated around a period in the early morning and a period in the late afternoon, with very little demand during the 4-5 hour period around lunchtime. In addition, the task of taking people home from the centres does not usually finish before 6 p.m. and may cause many drivers to work regular overtime. In these circumstances, the efficient scheduling of transport is important and the authorities visited employed one or more of the following procedures aimed at minimising cost:

- transporting groups of people to and from lunch clubs during the period around lunchtime when transport might otherwise be idle (which seems particularly appropriate in terms of overall value for money);
- employing the drivers to work in the day centres themselves;
- using taxi services which are paid by the hour;
- using the transport in other departments during the period when it might otherwise be idle.

The wide range in the transport cost percentages suggests the need for a further study in a number of authorities.

12. MEALS-ON-WHEELS AND LUNCH CLUBS

12.1 The service

Meals are provided to the elderly by social services departments by meals-on-wheels services, by lunch clubs, and by day centres, (and sometimes, to a limited extent, by home helps assisting with the preparation of food provided by the clients). They may also be provided by various voluntary organisations. The net expenditure on meals constitutes 3% of the social services departments' net expenditure on the elderly (excluding fieldwork and administration costs, CIPFA 1980-81 actuals). About half the national total of meals is provided by the meals-on-wheels services (MOW).

The provision of meals affects not only the most fundamental of the physiological dimensions of achievement - 'nutrition' - a minimum level of which is the prerequisite for achievement along all other dimensions - but a regular service also provides 'security'.

12.2 Effectiveness: Provision of meals-on-wheels

The provision of meals-on-wheels in the four authorities visited was as follows:

Table 12.1 - Meals-on-wheels provision

Authority	Provision of MOW/1000 in community/ week	Average number of* meals/client/week	% of clients receiving at least 5 meals/ week	Number of recipients/ 1000 in community	Weekend provision
'A'	184	5.5	80	34	Yes
'B'	91	5.0	84	19	Some
'C'	98	4.4	58	23	No
'D'	45	2.0	7	23	No

Note:

*based on the DHSS meals returns in November 1978 in authority 'A' and November 1977 in authority 'D', and an analysis by the study team of one week's rotas in authorities 'B' and 'C'.

Authority 'A' provides significantly more meals and to a relatively greater number of recipients (50% more) than the other authorities. Whether this is consistent with value for money depends on the validity of the view of professionals in authority 'A' that a high level of domiciliary provision inhibits the rate of deterioration in the circumstances of elderly individuals.

The apparently insignificant proportion of recipients in authority 'D' who may receive meals every weekday - even allowing for the relatively smaller number of highly dependent in its community - is hard to explain in a manner consistent with value for money and with practice in the other authorities. If an elderly person needs meals to be provided if he is to remain in the community then, presumably he needs a meal every day. The question is worth considering as to whether authorities 'A', 'B' and 'C' are tending to provide meals more frequently than is necessary, or whether authority 'D' is making it more difficult for people to remain in the community. Since the latter effect could be up to only 4/1000, it would appear that to a greater extent than the other authorities, authority 'D' is mobilising support from friends or relatives on the days when meals are not delivered.

12.3 Effectiveness: Allocation of meals-on-wheels

It is clearly important for value for money that the meals provided are allocated to those who need them most.

For those who receive home help, the study team was able to analyse the data from the home help surveys to determine whether the allocation process used by an authority was effectively discriminating according to dependency, support by friends or relatives, and provision of other services.

For the highly dependent, all authorities appear to be discriminating effectively in respect of who is, or is not a recipient, as shown by the following analysis:

Table 12.2 - % of those highly dependent who receive home help

Authority	Home help hours	MOW recipients	Not receiving MOW		Total
			but supported	but receiving: - more than 9 hours home help, or - other identified means of providing meals	
'A'	0 - 5	20	73	-	93
	6+	62	30	6	98
'B'	0 - 5 n.a				
	6+	52	24	24	100
'C'	0 - 5	35	50	-	85
	7+	63	29	-	92
'D'	0 - 5 n.a				
	6+	42	42	16	100

Similarly for those of the less dependent unable to cook main meals, all authorities appear to be allocating effectively to this group as is shown by the analysis below:

Table 12.3 - % of those less dependent who receive home help and are unable to cook main meals

Authority	MOW receipients	Not receiving MOW but supported or receiving: - more than 9 hours home help, or - other identified means of providing meals	Total
'A'	61	32	93
'B'	77	11	88
'C'	43	51	94
'D'	31	68	99

These two tables indicate that at least for those receiving home help, the allocation of meals-on-wheels to clients requiring them is effective. The question has also to be asked whether the provision of meals-on-wheels to those less dependent clients able to cook main meals (table 12.4) is consistent with value for money.

Table 12.4 indicates what is being provided to those who also receive home help.

Table 12.4 - % of less dependent home help clients in the community who are able to cook main meals but who receive MOW

Authority	%
'A'	5
'B'	10
'C'	25
'D'	80

The table suggests that authority 'D' is providing a much higher percentage of its meals-on-wheels to home help clients who are themselves able to cook main meals. The value of such provision depends on local judgement; however, the additional expenditure incurred is small - about £1000/1000 per annum for a half million population authority.

12.4 Efficiency of meals-on-wheels

Meals for the meals-on-wheels service are provided from four main sources:

- from kitchens run by the social services departments (which may also provide meals for lunch clubs),
- from kitchens attached to old people's homes,
- from kitchens run by other departments (generally education departments in conjunction with school meals),
- from outside suppliers.

Transport costs for the delivery of meals-on-wheels are typically incurred either by social services departments themselves (if they run their own vehicles) or by the local authority and allocated to social services (if the authority maintains a single fleet of vehicles). In some cases, meals are delivered by volunteers who may or may not be provided with delivery vehicles. The source of the meals (and the method of intra or inter-department charging policy in operation) and the method of delivery necessarily affect the unit cost of a meal provided.

For the four authorities visited, the study team's analysis of the costs incurred and income received is shown in table 12.5.

Table 12.5 - Costs of meals-on-wheels provided

Authority	Costs per meal delivered (£/meal)				
	Preparation	Delivery	Gross	Income	Net
'A'	1.0	0.7	1.7	0.3	1.4
'B'	1.1	0.6	1.7	0.3	1.4
'C'	0.8	0.3	1.1	0.4	0.7
'D'	0.8	0.2	1.0	0.3	0.7

Notes

(i) Preparation costs in authorities 'A' and 'B' are approximately 25-35% higher than for authorities 'C' and 'D'; this is very much in line with what might be expected for inner London authorities for which the costs of residential care and home help are similarly higher.

(ii) Whilst transport costs between inner London and metropolitan authorities might also be expected to show a similar percentage difference to (i) above, transport costs in authorities 'C' and 'D' are reduced below the expected level as follows

- in authority 'C', drivers of meals-on-wheels transport are utilised for other purposes in addition - this reduces the employee costs associated directly with the delivery of meals; employee costs form a large proportion of transport costs.
- in authority 'D', employee costs are reduced through the delivery of a proportion of meals-on-wheels by volunteer drivers.

(iii) The costs presented for authority 'B' have been computed on a basis similar to authorities 'A', 'C' and 'D' - i.e. preparation costs have been divided pro-rata to the number of meals produced for the meals-on-wheels services and for lunch clubs. The study team is aware, however, that in its own calculations, authority 'B' regards meals-on-wheels as the major activity and the preparation of meals for lunch clubs as a marginal activity; consequently authority 'B' allocates a larger proportion of total costs to its meals-on-wheels service than the study team's allocation. This method makes the gross cost of a meal in authority 'B' as £2.1 against the £1.7 shown above.

12.5 Effectiveness: Provision of lunch club meals

No transport is provided for attendance at lunch clubs. Their value is in relation to their contribution to the 'connectability' and general quality of life of those who are mobile, and to 'nutrition'.

Provision is quite different in the four authorities; whether there are any differences in effectiveness of the provision is a matter for local judgement.

Table 12.6 - Lunch club provision (meals/week)

Authority	Total meals prepared/ 1000 in community	£/meal	
		Gross cost	Net cost
'A'	264*	0.9	0.5
'B'	31	1.3	0.9
'C'	18	0.8	0.5
'D'	22	0.7	0.4

Note: *including an estimated 144 at day centres without transport, but excluding an estimated 14 at day centres with transport.

12.6 Efficiency of Lunch Clubs

The variations in gross cost are partly as a result of extra inner London costs. They may also result from difficulties in matching the number of meals prepared to the uncertain number of daily attendees.

In authorities 'A' and 'C', 7-13% of meals prepared were estimated to be wasted or supplied free to staff. Both authorities have tried and rejected payment in advance.

Authority 'C' monitors meals consumed and adjusts the preparation periodically; it has noted a decline in the wasted meals from 13% to 7% between the first and second half of the financial year. (This reduction, however, is insignificant in terms of total net expenditure).

12.7 Provision of all meals

The different policies are demonstrated by the following table:

Table 12.7 - Total meal provision/week (excluding day centres with transport)

Authority	MOW delivered + lunch club prepared/1000 community	Total net cost/week (£ per 1000)
'A'	448	371
'B'	122	192
'C'	116	68
'D'	67	40

The value for money implications of the large differences in total meal provision, and consequent differences in total net cost, are a matter for local judgement. Moreover, authorities may wish to consider whether or not the low number of meals per recipient per week which authority 'D' provides is an indication of what can be done to mobilise support from friends or relatives.

13. SHELTERED HOUSING

13.1 The service

Sheltered housing is taken here to be purpose-built or suitably adapted property provided mainly for the elderly comprising a number of flats grouped together within a "scheme". Different schemes can vary considerably in the facilities they provide and the degree to which they are "sheltered", ranging from purpose-built units with a resident warden, communal facilities and speech intercom to a group of flats which are visited by a peripatetic warden. The provision of sheltered housing is primarily a housing department function.

CIPFA Personal Social Services statistics (1980-81 actuals) show the social services net expenditure on sheltered housing to be £24 million, which represents 4% of the total money spent on services for the elderly. There are, however, considerable differences in social services' financial involvement in sheltered schemes so that this figure does not relate to the total accommodation available. The social services department may or may not contribute towards the running cost of sheltered accommodation, and similarly may or may not have responsibility for the employment and/or payment of resident wardens. In 1979 there were an estimated 215,000 units of sheltered housing including 40,000 (19%) units provided by housing associations. During the last five years or so there has been a rapid growth in sheltered housing stock.

Sheltered housing not only provides accommodation but also a place for meeting fellow clients (through the provision of communal facilities), regular visits (by the warden) and an emergency service (through the provision of alarm systems). There is some variation in the extent to which wardens provide assistance with everyday tasks - for example, the collection of pensions and medicines.

Thus, in addition to providing for housing need, sheltered housing affects the following dimensions of achievement:

- physiological
  - environment
- security (some)
- connectability (some)

13.2 Data

The data available to the study team covered the sheltered housing provision in total and - for those who also receive home help - the survey data covered the characteristics of recipients. The data is not sufficient, however, to provide the basis for an analysis of the coverage with sheltered housing for sub-groups of the elderly separately. Therefore, the study team has not been able to undertake an extensive analysis of appropriate levels of sheltered housing provision.

For the same reason, the effects of the different methods of allocating vacancies and managing the resident warden service in the four authorities visited have not been analysed.

13.3 Effectiveness: Provision of sheltered housing

The provision of sheltered housing in the four authorities visited was as follows:-

Table 13.1 - Provision

Authority	Very sheltered housing (i.e. combined with enhanced welfare and care facilities)	Sheltered accommodation with resident warden (units per 1000 elderly)	Peripatetic warden
'A'	None	18	Substantial
'B'	Pilot project planned (i)	9	None
'C'	None	28	None
'D'	Pilot project planned	39	None (ii)

Note:

(i) The study team has been informed that, subsequent to its visit, the Council in authority 'B' has planned to go ahead with a 'very sheltered housing' scheme on a housing estate in its area.

(ii) Authority 'D' provides substantial numbers of visiting wardens who visit clients in their own homes on a regular basis for short visits (5 - 10 minutes) and thus provide a monitoring service.

The four authorities visited provided significantly different levels of sheltered housing - in terms of both absolute provision and levels of intensity. For the reasons specified in 13.2 the study team has not conducted an analysis of the possible appropriate levels of such care. The question is worth considering as to whether the four authorities visited should conduct such an analysis - to clarify the purpose of sheltered housing and hence to analyse the level of such provision appropriate in that authority.

13.4 Effectiveness: Allocation of vacancies

It is clearly important for value for money that sheltered housing is allocated to those who need it most.

All the authorities visited agreed that the social services department should have a role in the assessment of clients for sheltered housing. However, the housing department made the final decision in the allocation of vacancies in all four authorities. The characteristics of the SSD involvement in the allocation process are as follows:

Table 13.2 - Characteristics of allocation process

Authority	Information provided by SSD?	SSD representative at allocation panel?
'A'	Yes	No
'B'	No	Yes
'C'	Optional	No
'D'	Yes	No

The argument in 13.1 indicated that sheltered housing affects dimensions of achievement of concern to social services departments. It follows that the characteristics of the elderly applicants; physical disability, degree of support from friends or relatives etc., can affect the value of providing sheltered housing to an individual. Depending on the importance given to the dimensions of achievement by the SSD, authorities 'A', 'C' and 'D' should consider whether there is sufficient involvement of the SSD in the allocation process.

13.5 Effectiveness: Management of resident wardens

The most common forms of sheltered accommodation in the four authorities visited incorporate a resident warden. The role of these wardens is very wide and in practice often goes far beyond their job description.

The SSD involvement in the management of resident wardens in the four authorities was:

Table 13.3 - Characteristics of the management of resident wardens

Authority	Resident wardens managed by SSD?
'A'	Yes
'B'	No
'C'	Yes
'D'	Yes*

Note: *resident wardens are considered a community service and are managed via domiciliary services organisers.

As indicated in 13.1 resident wardens provide a service which can affect the dimensions of physiological achievement (e.g. by the collection of pensions and medicines) and security (via the alarm system). The extent of this achievement and the co-ordination of sheltered housing with other social services depends on the service given by wardens. It may be worthwhile for authority 'B' to consider whether the value of sheltered housing would be increased by formalising the integration of the resident warden service within the social services department.

14. THE PROVISION AND CO-ORDINATION OF COMMUNITY SERVICES

14.1 Overview

In the authorities studied, the total net expenditure on community care varied by about ±40%; in authorities 'B' and 'D' the total expenditure on community care is about £4,000 per annum/1000 elderly, in authority 'C' about £7,000 per annum/1000 elderly and in authority 'A' about £10,000 per annum/1000. This chapter analyses these differences and in particular addresses the following issues:

(i) Can the least observed total expenditure on community care be sufficient to ensure that all members of the 'high public sector dependency' group could be given the basic care they require to be able to survive while also ensuring that there is sufficient home help available to give the least observed cover (4%) of the 'low public sector dependency' group (referred to in chapter 10)? If so does the least observed total expenditure on community care appear to be easily sufficient or just about sufficient?

The analysis presented in this chapter suggests that the expenditures on community care in authorities 'B' and 'D' (which are both close to the least observed) can be just about sufficient to ensure that all members of the 'high public sector dependency' group are given the basic personal care they require to be able to survive and to ensure that most are given the necessary non-personal care. However, for this to be true the community services have to be co-ordinated well and in such a way as to mobilise support from friends and relatives to provide some of the necessary non-personal care to those requiring personal care. The analysis also suggests that this support could probably be mobilised by low levels of total community expenditure.

This leads to the observation that the least observed total expenditure on community care is a useful marker for separating community expenditure into two parts; the first part being on services such that the value provided by these services is worthwhile irrespective of cost, and the second part being additional expenditure whose worthwhileness depends on local judgement concerning the value of the additional services provided compared to the additional cost.

(ii) To what extent are the differences observed in total expenditure on community care between authorities accounted for by differences that exist between them in:

- the unit costs incurred in providing services, and
- economic and demographic factors, the availability of NHS hospital beds and the method of funding expenditure on wardens for sheltered housing schemes (i.e. between SSDs and housing departments)?
- the levels of residential provision?

Standardising for the factors above reduces the variation in total net expenditure on community care to ±35%.

(iii) What are the minimum estimates for the levels of additional community expenditure in the four authorities which are due to (a) an authority providing services over and above the level of the least observed total expenditure on community care and/or (b) an authority providing a mix of methods of care which, for the mix as a whole, costs more per unit to the social services department than the mix provided by the least observed total expenditure on community care?

The analysis in the chapter develops these estimates and concludes that, in authorities like 'A' and 'C', there are very substantial amounts of additional expenditure. Whether or not this additional expenditure gives sufficient value compared with the cost incurred is a matter for local political judgement on the value of the effect on quality of life of elderly people and of their friends and relatives, and for professional judgement on the extent to which this expenditure may be inhibiting the rate of deterioration of elderly people.

14.2 The substitution of other community services and/or support from friends and relatives by home help

A very important complication in the assessment of total community expenditure is the possible effects that provision of one method of care may have on the requirement for the provision of other methods of care or on the ability of friends and relatives to provide other methods of care. In practice, this may make assessment of the proportion of the elderly who can be supported by friends and relatives a function of the amount and mix of services provided.

The validity of the hypothesis that "provided that community care is focussed on the 'high public sector dependency' group, home help substitutes for other community services and/or support from friends and relatives" is suggested by Exhibit 14.1. This shows a lack of a relationship between residential places and the provision of home helps. If there were no strong effect of substitution between home helps and other community services and/or support from friends and relatives, then one would expect that, for very low provisions of home help, relatively high levels of residential provision would necessarily have to be provided; and for high provision of home help, a lower provision of residential care would be possible. In fact, Exhibit 14.1 does not show either of these effects, which is what would be expected if home help can substitute for and can be substituted by other community services and/or support from friends and relatives.

Further suggestion of the validity of the hypothesis comes from the rather low coverage of the 'high public sector dependency' group in two of the authorities, where there is no evidence of substantial failure of care.

The analysis in the next section assumes some of the consequences of this substitution and uses them to suggest the methods of care for the 'high public sector dependency' group which can be sufficient to provide members of this group with the personal care and non-personal care which they require, and which it seems likely must be being provided in practice.

14.3 Alternative methods of community care to the 'high public sector dependency' group

The 'high public sector dependency' group comprises combination groups I, II and III (as described in section 10.7). Of these, the highly dependent (combination groups I and II) require both personal and non-personal care and, in the case of combination group II, have support from friends and relatives. Combination group III require non-personal care and have little or no support from friends and relatives.

The personal care required by the highly dependent can be supplied by various methods of care including home helps, day centres, district nursing and, in some cases, friends and relatives.

Consider those members of the 'high public sector dependency' group who receive home help plus other services. Home help sometimes provides both personal care and such non-personal care as heavy cleaning and shopping. Other services such as meals-on-wheels can provide the other non-personal care of cooked meals. It is clear that the provision of home help plus other services can be sufficient to enable members of the 'high public sector dependency' group to survive. The same argument applies for those elderly who pay for private community services.

Now consider those members of the 'high public sector dependency' group in the community who do not receive home help. Their personal care can be provided by day centres, district nursing and, in some cases, friends and relatives. Given the hypothesis in the previous section that home help is substituted by other community services and/or support from friends and relatives, it seems not unreasonable to assume that if members of the highly dependent who are supported by friends and relatives (i.e. combination group II) are given the personal care they require by these means, then the support from friends and relatives will be mobilised to provide some of the basic non-personal care they require for survival.

Finally, consider those members of the 'high public sector dependency' group who are in sheltered housing but do not receive home help. For those who do not require personal care (i.e. combination group III), it is reasonable to assume that if they were not receiving the basic non-personal care they require - and which the residential warden could not provide - then the residential warden would mobilise the services required to provide this care. Hence the provision of sheltered housing to members of combination group III can be sufficient to ensure that they receive the basic non-personal care they require for survival.

The arguments above lead to the following table which shows the methods of care for each of the combination groups I, II and III which can be sufficient to provide members of that group with the basic personal and non-personal care which they require to survive and are likely to occur in practice.

Table 14.1 - Possible methods of care for members of the 'high public sector dependency' group

Method of care	Combination group I	 II	 III
Home help plus other services	X	X	X
Private care in the community (i.e. private home help plus other private services)	X	X	X
Day care (with transport) plus support from friends and relatives		X	
District nurse plus support from friends and relatives		X	
Intensive support from friends and relatives and no other services		X	
Sheltered housing			X

14.4 Analysis of least observed community expenditure

Appendix 6 provides estimates for the numbers of elderly in the 'high public sector dependency' group in authorities 'B' and 'D' who receive home help. Appendix 7 provides estimates for the numbers of people receiving other methods of care in the two authorities (net of the amounts provided to those who receive home help). A summary of these estimates is shown in Table 14.2 below.

Table 14.2 - Maximum estimated number of recipients of community care/1000 in authorities 'B' and 'D' (for services other than home help, the estimates are net of those receiving home help).

Method of care	Recipients/1000	
	'B'	'D'
Home help plus other services	22	8
Private care in the community (i) (i.e. private home help plus other private services)	10	n.a.
Day care (with transport)	2	3
District nurse (max) (ii)	7	8
Intensive support from friends and relatives (iii)	14	15
Sheltered housing (iv)	0 - 6	0 - 36
	55 - 61	34 - 70 (at least)

(i) Information not available. However the socio-economic characteristics of authority 'B' are such that this may be a significant factor in authority 'B'. Data available suggests that the level of home help provision/1000 in one area within authority 'B' (which appears to have socio-economic characteristics closer to those of other authorities than the other areas) is approximately 50% higher than for the authority as a whole. This implies that private home help may provide care for at most half as many clients as the local authority home help service i.e. private home help may be taken by 10/1000 in authority 'B'.

(ii) Assuming that those in combination group II with friends and relatives who do not provide the personal care they require all receive district nursing and no other services.

(iii) It is estimated (ref.5) that one half of combination group II could receive sufficiently intensive support from friends and relatives to require no local authority services. This observation implies the figures in the table.

(iv) Range provided because the characteristics of sheltered housing residents are not available.

Given the arguments that:

(i) the provision of personal care to members of combination group II by day care, district nursing or friends and relatives can be sufficient to ensure that they receive the basic care they require for survival as the support from friends and relatives is likely to be mobilised to provide some of the necessary non-personal care (section 14.3), and

(ii) sheltered housing is directed towards combination group III

it follows that the provision of community services in authorities 'B' and 'D' is sufficient to ensure that, with good co-ordination of community services, respectively, up to 61/1000 and 70/1000 elderly people in the 'high public sector dependency' group in the community could be receiving the basic care they require to be able to survive. These numbers are about 10% less than the estimated numbers of elderly people in the 'high public sector dependency' group in the community in the two authorities.

Since public disquiet would, doubtless, show itself if elderly people were not receiving at least the basic levels of care required for survival, it follows that the provision of community services in authorities 'B' and 'D' could just about be sufficient to ensure that members of the 'high public sector dependency' group are given the basic care they require to be able to survive although this is being done on the basis of an additional burden of care assumed by friends and relatives.

Because the levels of community service in authorities 'B' and 'D' are only just sufficient to provide the basic levels of care required for survival, it follows that the expenditure incurred in providing these levels of service (the least observed total expenditure on community care) is a useful marker for separating community expenditure into two parts; the first part being on services such that the value provided by these services is worthwhile almost irrespective of the cost, and the second part being additional expenditure whose worthwhileness depends on local judgement concerning the value of the additional services provided compared to the additional cost.

14.5 Standardisation of community expenditure

In order to facilitate the comparison of community expenditure between authorities and thus to estimate the extent of additional expenditure in the four authorities, appendix 9 provides an analysis to standardise approximately for the extent to which certain economic and demographic factors account for differences in expenditure between the authorities. These factors comprise:

(i) Differences in costs per unit of provision due to differences in:

- price levels
- charges

(ii) Differences in economic and demographic factors due to differences in:

- age structure
- the proportion of pensioners living alone
- the level of long-stay hospital bed utilisation
- the method of funding expenditure on wardens for sheltered housing schemes (i.e. between SSDs and housing departments).

(iii) Differences in the levels of residential provision.

The results of this analysis are as follows:

Table 14.3 - Standardisation of net expenditure for differences in unit costs, economic and demographic factors and the levels of residential care

	Net expenditure (£000s) per annum/1000 elderly aged 65 or over			
	'A'	'B'	'C'	'D'
Net expenditure (at actual net cost/income)	£182	£132	£104	£100
Cost variance	(32)	(12)	11	12
Economic and demographic variance	(13)	(19)	2	(17)
Residential variance	(6)	(13)	2	(3)
Net expenditure adjusted for national average levels of residential care	£131	£ 88	£119	£ 92

The standardised expenditure incurred on providing the national average levels of residential care (17/1000 elderly aged 65 or over) is about £49,000 per annum/1000 elderly aged 65 or over (appendix 4). Therefore the adjusted total net expenditure on community care in each of the four authorities is given by:

Table 14.4 - Standardised levels of total community expenditure

	Net expenditure (£000s) per annum/1000 elderly aged 65 or over			
	'A'	'B'	'C'	'D'
Net expenditure adjusted for national average levels of residential care (Table 14.3)	£131	£ 88	£119	£ 92
Less expenditure on providing national average levels of residential care	49	49	49	49
Total adjusted net expenditure on community care	£ 82	£ 39	£ 70	£ 43

The variation between the authorities in the total net expenditure on community care is reduced from ±40% to ±35% after adjustment for differences in unit costs, economic and demographic factors and the levels of residential provision.

14.6 Co-ordination for daily receipt of care

There is still the question which has to asked of whether the provision of types of care can be so co-ordinated that at least the most highly dependent receive some form of personal care each week day.

Some suggestion that this is possible is available from the survey of those home help clients receiving 6 or more hours help per week:

Table 14.5 - % of home help clients receiving 6 or more hours per week (7 hours in authority 'C') getting:

Authority	Home help visits per week				District nurse visits(ii)	District nurse and/or day centre visits
	Less than 5 %	5 %	6-7 %	more than 7 %	%	%
'A'	----- data not collected ----				24	32
'B'	9	42	30	19	68	71
'C' (7 or more hours)	36	64	-	-	22	29
'D'	88	12	(i)	(i)	33	42

Notes:

(i) insignificant

(ii) Data collected from home help organisers rather than direct from NHS sources.

These figures indicate that those clients who receive 6 or more home help hours per week in authority 'B' may all be receiving a visit every weekday from either a home help or a district nurse, but there must be at least 14% in authority 'C' and 55% in authority 'D' who have at least one week day uncovered by home help or district nurse (column 1 minus column 5). On the other hand, when day centre visits are included, it appears that almost all clients receiving 6 or more hours per week of home help could, each week day, be receiving at least one visit from a home help or nurse, or be making a visit to a day centre, except in authority 'D' where this may not be so for 50% of these clients. However, possible error in the data on district nursing could account for this and, in addition, authority 'D' maintains security through a system of visiting wardens. The study team was not able to assess the effects of these influences but considers it not unreasonable that one or both of these influences could mean that adequate security is maintained for the highly dependent.

Different approaches to weekend cover are taken in the authorities. Authorised 'A' and 'B' run a regular weekend home help service with home helps; authority 'C' provides weekend cover only in emergencies; authority 'D' provides minimal cover in some cases. It has been suggested to the study team by one authority that providing a basically weekday service only may encourage support from friends and relatives.

14.7 Analysis of total community expenditure

From the arguments earlier in this chapter the standardised least observed total expenditure on community care is a useful marker for separating expenditure in each authority into two parts. The first part comprises expenditure on services such that the value provided by these services is worthwhile irrespective of cost. The second part comprises additional expenditure whose worthwhileness depends on local judgement concerning the value of additional services provided compared to the additional cost. The standardised least observed total expenditure on community care provides a baseline for the first type of expenditure. The analysis to provide estimates of the lower limits for the levels of the additional expenditure on community care in each authority is shown in Appendix 9.

The estimation for the lower limits of additional community expenditure is performed by comparison between the expenditures on community care in the four authorities at standard costs per unit of service. Allowances are made in the estimation for differences between the authorities in hospital and residential provision, sheltered housing expenditure, age structure, the proportion of elderly living alone, and an allowance for private sector care.

The analysis is performed by dividing the elderly into only 2 groups so as to avoid the estimates being unduly sensitive to the specific assumptions made. The two groups used are the 'high public sector dependency' (HPSD) group and the 'low public sector dependency' (LPSD) group. Allowance is made for the additional requirement for community services that may exist in authorities 'A' and 'C' relative to 'B' and 'D' due to the possible shortfall of services in those two authorities to the HPSD group. Allowance is also made for the additional requirement for community services that may exist in authorities 'A', 'C' and 'D' relative to 'B' due to the particular socio-economic factors in authority 'B' that may lead to a substantial amount of community care being provided privately in that authority.

It is important to note that, in order to ensure that the estimates of the additional expenditure on community care in the four authorities are minimum estimates, maximum allowances to the standardised least observed levels are made where appropriate.

The results of this analysis are as follows:

Table 14.6 - Analysis of community expenditure at standard costs, standard demography and national average levels of residential care

	Net expenditure/1000 elderly aged 65 and over			
	'A' £	'B' £	'C' £	'D' £
Minimum observed expenditure to LPSD group:				
- Least observed	13	13	13	13
- Additional requirement for services to replace private services	6	-	6	6
Minimum observed expenditure to HPSD group:				
- Least observed	19	19	19	19
- Additional requirement for services to replace mobilised support	2	2	2	-
Additional expenditure:				
- LPSD group	20	-	12	5
- HPSD group	10	7	8	-
- either LPSD or HPSD group	12	-	10	-
Total adjusted net expenditure on community care	£82	£39	£70	£43

The standardised least observed expenditure on community services is taken to be consistent with value for money whatever may be local judgements on value (subject, of course, to the provision of service being efficient). The value for money of additional expenditure, however, is dependent on:

(i) Whether or not local political judgement values the extra achievements provided by services on which this expenditure is incurred sufficiently to justify the extra cost incurred (and indeed whether or not the cost of providing further additional services and thus further additional achievements would be justified) i.e. political judgement on the value of the effect of this expenditure on the life of elderly people and of their friends and relatives.

(ii) Professional judgement on the achievements provided by different methods of care some of which cost more per unit than others and on the extent to which the expenditure may be inhibiting the rate of deterioration of the elderly.

It can be seen from Table 14.6 that the levels of the additional expenditure can be large and vary considerably between authorities. For an authority with a population of half a million, these figures imply that, in authorities like 'A' at least £3 million per annum, and in authorities like 'B' and 'D' at least £¼ million per annum is additional expenditure.

This indicates the importance of the local political and professional judgements discussed above. There is a need to ensure that such judgements are carefully considered and that sufficient information concerning the provision and allocation of services is collected and analysed to allow this to take place.

14.8 Differences in the methods of operating the home help service

The ways in which the methods of managing and operating the home help service are associated with the findings in this chapter and chapter 10 may be expected to relate to an authority's approach to:

- assessment of client need,
- reassessment and control of delivered service,
- co-ordination with other services.

Assessment. In each of the four authorities, upon receipt of a referral or request for home help, the prospective client is visited by a home help organiser or assistant (domiciliary services organiser in authority 'D'). The client's needs for home help are assessed; and an allocation of a number of hours help per week is determined.

The process for the assessment of needs is changing: not long ago in at least one of the authorities visited, the assessment was often prescribed by the referring doctor; the process is gradually becoming more formalised within the SSDs as follows:

Authority 'A' - home help organisers are involved in developing a guideline manual setting out what forms of care should be provided to each type of client; frequency of visits is specified for some groups in one area; the assessment is checked in at least one area by a visit from another senior officer after six or eight weeks.

Authority 'B' - progressively supplementing the organisers' visit cards with detailed information on the other services received by a client and how much time is needed for various tasks.

Authority 'C' - time is usually allocated in 'blocks' of three hours; the procedures for assessing the required number of blocks are based on informal criteria.

Authority 'D' - time (in one area) is usually allocated in blocks of three hours; the range of disability for which a service can be provided is extended for the less dependent through provision of visiting wardens.

Reference to the conclusions of 10.12 suggests that the assessment approach of authority 'A' is fully effective in practice insofar as the home help service can be regarded in isolation.

Reference to table 10.7 suggests that the use of three hour blocks is associated with the higher average amounts of time per person to each of the lower dependency combination groups III and IV. It is for local judgement to assess whether any such tendency of 'blocking' to put up these average times is consistent with value for money.

Reassessment and control of service delivered. Changes in circumstances will, from time to time, change an individual's needs for home help. An effective reassessment procedure is believed by all four authorities to be important in trying to ensure that the service is well matched to requirements. The reassessment process also exerts some control over the actual service delivered - though at wide intervals of time. The approach to reassessment varies:

Authority 'A' -	reassessment effort has been increased substantially over recent years; a system has been introduced whereby the responsible officer regularly receives statistics of the number of visits made by home help organisers; minimum visiting requirements are established and the achievement or shortfall of all organisers are compared with these minima and published; a system exists to prompt organisers when a client is due for review. Clients receiving large amounts of help are reviewed more frequently.
Authority 'B')- and) Authority 'D')	the importance of reassessment is recognised but there is a belief that shortages in available organiser time cut down the amount of reassessment carried out.
Authority 'C' -	reassessment is carried out at least once a year as part of an annual means test.

Reference to the conclusions of 10.12 again suggests that the reassessment approach of authority 'A' is effective, again regarding home help as an isolated service.

Co-ordination. The high dependency clients in the community are those most in need of co-ordinated packages of care; their numbers are relatively small, say 30/1000 as compared to 100 or so less dependent/1000 who typically receive home help.

The problem of managing the allocation and delivery of a package of care to the highly dependent is essentially different from co-ordinating service to the less dependent.

For the highly dependent, the problem is one of assessing and managing a package of care, case-by-case co-ordination of several services and review especially of those at risk for requiring residential accommodation.

However, for the less dependent, the problem of co-ordination manifests itself in finding ways of ensuring that a client is referred to the most appropriate form of care, whatever the source of referral and its recommendation - thus a referral might be for home help but day care might be determined as being more suitable. Thus, the problem is more one of organising efficiently the logistics of a large number of home helps and others visiting a large number of clients.

If authorities 'B' and 'D' are achieving the necessary coverage of their highly dependent, then they must be co-ordinating packages of care effectively. On the other hand, it is not clear whether or not authorities 'A' and 'C' are doing this.

The methods of achieving co-ordination in the four authorities are different, except that all have one organiser responsible for allocating home helps and meals-on-wheels in an area. The other main features of co-ordination are as follows:

Authorities 'A', 'B' and 'C':

- any co-ordination of community services is performed by the home help/meals-on-wheels organiser (or, in authority 'A', by the day centre co-ordinator) or by social workers (but note that for the less dependent home help clients, only 15%, 30% and 20% respectively were referred from within the social services department);
- there is no specific mechanism such as an allocation panel for co-ordinating services to the highly dependent.

Authority 'B' in addition:

- client home help records aim to show all other services (but records are difficult to maintain);
- there is formal consideration of community services for clients on residential waiting list;
- home helps are charged with referring deteriorating clients to social workers.

Authority 'D':

- all community services (except sheltered housing) are controlled by a domiciliary services organiser.

Reference to the conclusions on co-ordination suggests that the method of co-ordination in authority 'D' must probably be effective, and also in authority 'B', although in authority 'B' this may be a result of pressure on resources.

The essential difference between the methods, as it appears to the study team, is that only in authority 'D' is there a mechanism for co-ordination to take place before any resources are allocated, whereas in the other authorities - even in authority 'B' - co-ordination generally takes place only after some resources have been allocated. The study team suspects that organisers must often be reluctant to change allocations soon after they have been made, and therefore that the method of co-ordination in authorities 'A', 'B' and 'C' is likely to be less effective than in authority 'D'; however, it should be noted that it may be difficult for one person to carry out the tasks of co-ordinating all domiciliary services and of managing the home helps so as to achieve proper differentiation of help according to dependency and efficiency in its scheduling and routing.

15. THE PROVISION OF SERVICES AND VALUE FOR MONEY IN THE FUTURE

The previous chapters have been concerned with a review of value for money in the provision of services to the elderly in an essentially static environment - i.e. based on the study team's analysis of the situation existing in 1980-81.

The parameters of the problem, however, are not static and there is no doubt that the achievement of value for money in the future will require a great deal of careful planning by those responsible for the provision of care if changes in parameters already evident are to be accommodated.

The study team is aware that:-

i) the 1981 DHSS publication 'Care in Action' (Ref. 8) indicates the broad approach the Secretary of State wishes authorities to follow in developing care to the elderly, including the following major objectives:

   - "to strengthen the primary and community care services, together with neighbourhood and voluntary support, to enable elderly people to live at home"

   - "to encourage an active approach to treatment and rehabilitation to enable elderly people to return to the community from hospital whenever possible";

ii) until recent years, expenditure on social services has been partially protected from the effects of changes in the financial climate; in the current environment, however, social services departments have not escaped the cuts in local government expenditure effectively required by central government.

Whilst each of these factors necessarily impacts the plans that an authority may have for the provision of services in future years, any such plans have to be made in the context of the important projected changes in age distribution in the elderly population over the next ten years.

15.1 Projected changes in the elderly population and their effect on the demand for services

It is generally agreed that, over the next decade, elderly people will present increasing demands for services by virtue of the projected national average change in age distribution in the elderly population:-

Table 15.1 - Projected change in age distribution (national average)

Age group	Projected change in size (national average)
65-74	- 4%)
75-84	+14%)+16% aged 75)+ 2% in total
85+	+26%) or over)

Source: 'Community Care' (Ref. 1)

Note: Clearly, these projected changes will not apply equally in each authority; in particular, in certain inner London boroughs, as a result of migration, the numbers of elderly people are currently declining, although their proportion in the total population is, at the same time, rising - the extent to which this fall in the numbers of elderly will be offset by an increase in the average level of public sector dependency of those remaining (as a result of the migration of previously supporting friends and relatives) has not been analysed specifically as part of this study.

Given this national average change in age distribution then the proportion of elderly in the population aged 75 or over will rise from approximately 38% of those aged 65 or over (CIPFA statistics, 1980-81 actuals) to almost 43%. This is an important change since the demand for major services is higher from the group aged 75 or over:-

Table 15.2 - Demand for services (based on current provision)

	Clients per 1000 elderly by age group	
Age group	Residential	Home help
65-74	4.6	47.8
75+	37.4	175.3

Source: 'Community Care' (Ref. 1)

The increase in demand for these services, based on the increased proportion of the elderly population aged 75 or over, and the proportion of the age groups 65-74 and 75 or over currently provided with services will therefore be as shown in Table 15.3:-

Table 15.3 - Increase in demand for services from changing age distribution

	Provision of services/1000 elderly	
	Residential places	Home help clients
Now	17.1	96.2
10 year projection (if service level maintained)	18.7	102.6
Increase %	9.4%	6.7%

If these projected increases in demand for services are applied to the framework estimate developed in chapters 8 and 9 (with the percentage increase in demand for hospital services being taken to be equivalent to the percentage increase in demand for residential services, as discussed in appendix 9), and to authority 'B's provision of home help (the lowest observed) which is the major domiciliary service, then the current and projected framework requirements for major resources are as follows:-

Table 15.4 - Current and projected framework requirements

	Current resources/1000		Projected resources/1000		
	Framework	Average provided	Framework (i)	Provision required (ii)	Average provided by current resources (iii)
Hospital beds	9½-13½	10	10½-15	11	10
Residential places	17-21	17	18½-23	18½	16½
Home-help (FTEs) (minimum observed: authority 'B')					
- HPSD	2.11) 4.21	6.17	2.31) 4.49	6.58	6.05
- LPSD	2.10)		2.18)		

Notes i) 'Projected framework' for hospital, residential, home help

= current framework x 1.094

Projected framework for home help (LPSD)

= (current framework (total home help) x 1.067) - projected framework (home help HPSD)

ii) 'Provision required' is the average that would be required in order to provide the same level of service as at present but to the changed population:

Provision required for hospital, residential

= current average x 1.094

Provision required for home help

= current average x 1.067

iii) 'Average provided by current resources'

= current average ÷ 1.02

where 1.02 reflects the projected average 2% increase in the total elderly population aged 65 or over.

The results of computing projected resource requirements on the basis of the framework developed within this report suggest that, if no changes were made in the resources provided, and if the resources provided were currently allocated to sub-groups of the elderly in accordance with the reference framework, for authorities on average:

- the number of hospital beds currently provided will be marginally less than that required under the projected framework, and will be less than the average required for all authorities in order to provide the current level of service;
- the number of residential places currently provided will be somewhat less than that required to support the projected framework estimates, and somewhat less than that required to support the current level of service;
- the amount of home help currently provided will be sufficient to support the projected service level required on the basis of the current lowest observed in authority 'B'.

On the basis of the projected framework requirements, there is little opportunity for any reduction in the average level of either hospital or residential resources currently provided; on the contrary, if services were to be provided in order to maintain the current pattern of service extra resources would have to be provided as follows:-

Table 15.5 - Additional resource requirements to maintain current pattern of service

	Resources/1000 elderly		
	Hospital beds	Residential places	Home help FTE
Projected requirement	11	18½	6.58
Actual provision projected forward	10	16½	6.05
Additional resources	1	2	0.53
Net cost/unit p.a. to SSD, say	-	£3,000 (table 6.4)	£4,000 (table 6.2)
Net cost p.a. of additional resources	-	£6,000	£2,000

For a typical authority with a population of 75,000 elderly, the net cost of these additional resources would therefore amount to approximately £600,000 p.a. even if resources were currently allocated in accordance with the reference framework.

If, however, the assumptions are made that:-

i) no increase in hospital beds is forthcoming (as a possible method of encouraging rehabilitation and the development of community care services, supported by the Secretary of State) and, following the reference framework, it is unlikely that these elderly persons could be accommodated in residential homes;

ii) residential provision is increased up to the minimum projected framework level of 18½ places/1000;

iii) owing to financial constraints, no general increase in the level of home help is provided, since on average, the current provision is adequate to cover the projected service level required on the basis of the current lowest observed, in authority 'B'.

then the additional resource requirements would be as in table 15.6 below:-

Table 15.6 - Adjusted additional resource requirements

	Resources/1000 elderly			
	Hospital beds	Residential places	Intensive community packages	Home help FTEs
Additional requirement to maintain current level of service	1	2	-	0.53
Assumptions:				
- no increase in hospital beds	(1)		1	
- no increase in home help				(0.53)
Adjusted additional resources	-	2	1	-
Net cost/unit p.a. to SSD (table 6.4)	-	£3,000 (say)	£1,800 (say)	-
Net cost p.a. of additional resources		£6,000	£1,800	

For a half million population authority, even if resources were currently allocated in accordance with the reference framework, the net cost of these additional resources would still therefore amount to approximately £600,000 p.a., consisting of:-

i) the provision of 2 residential places/1000 - i.e. approximately 150 places or, say, 3-4 new residential homes

ii) the provision of an intensive community-based package to a further 75 clients.

These additional requirements for provision of capacity are based on maintaining provision to satisfy the reference framework estimated requirements. However, reference to the nature of the groups giving rise to these requirements suggests that there is, at most, only very limited scope for changing these requirements in line with the 1981 'Care in Action' guidance; and further, that any such changes would be unlikely to affect overall cost - since some residential costs would be replaced by high intensity community care packages - unless the extra community care were to be found from reductions in the amount of community care delivered currently in addition to the lowest observed.

Thus the changing demography must induce changes in the amount and pattern of services delivered. It is clearly a matter for political judgement as to how these changes will be financed, whether it be by provision of additional resources, or by reducing the amount of current additional expenditure. (Note that most of the increased expenditure could, for authorities on average, be found by reducing current additional community services. The £600,000 estimated above as the additional requirement for the typical - sized half million population authority could be provided by a reduction of 2 FTE home helps/1000; the average current provision of home help in the projected environment of 6.05 FTE/1000 compares with the projected service level required on the basis of the current lowest observed, in authority 'B' of 4.59 FTE/1000, a difference of 1.46 FTE/1000, sufficient to support 75% of the additional expenditure required from the projected framework).

These underlying changes due to increases in demand, to changes in balance between facilities, and to changes in allocation of facilities to different groups of people, will place additional stress on effective planning and implementation of change, and on effective allocation of facilities to those who will benefit most from what can be provided.

This observation gives added weight to the suggestion made previously in this report that information systems to support effective allocation should be improved.

It also suggests that social services departments should consider whether their 5-year planning of provision levels by area is adequate, or should be improved by being supported by information systems on the lines of the 'activity responsiblity reporting' proposed in other studies carried out by Arthur Andersen & Co. for the District Audit Service.

Lastly, the observation suggests that social services departments should consider whether their planning and control of the implementation of change is adequate, or should be improved on the lines of the 'policy implementation guidelines' likewise proposed in the studies carried out for the District Audit Service.

METHODOLOGY OF ANALYSIS (INCLUDING VALUE FOR MONEY DIAGRAM)

Methodology

The methodology examines what is the least expensive mode which will be able to achieve an adequate level of care for a group of clients with particular characteristics along the various dimensions in which the group is deficient if unassisted. Compromises between achievement along various dimensions, or betweeen the interests of the particular group of clients and of other groups and institutions, have to be made. The process is represented in the following diagram, with accompanying notes, which assumes that the particular group of clients is considered for placement first in hospital care, then in residential care and finally within the community.

Note:

The approach of considering the three modes of care essentially in the sequence hospital care, residential care and then domiciliary care (i.e. most expensive mode first) was adopted by the study team to determine estimates for the provision of services within these modes. To assign an individual to a particular mode of care, however, the model is more effectively utilised by reversing this sequence and considering the suitability of the three modes of care in the order domiciliary care, residential care and then hospital care (i.e. least expensive mode first).

Explanatory notes on the Value for Money Schematic

1. Modes of Care

Hosp - Hospital
Res - Residential accommodation
Dom - Domiciliary

2. Dimensions

P - Physiological
S - Security
C - Connectability

3. Questions

A '?' indicates where a judgement or discrimination between incommensurables occurs.

- Mode ? Dim — Is the mode the least expensive of the modes of care which are adequate for this dimension ? For example:

  Res ? P

  Is residential care the least expensive mode of care which will provide adequate achievement along the physiological dimensions?

- Mode (d)?d' — Is the mode which provides adequate care along the dimensions (d) also the least expensive mode for providing adequate achievement along the additional dimension d'? For example:

  Res (P+S)?C

  Is residential care, which has already been judged adequate for achievement along physiological and security dimensions, also the least expensive mode for providing adequate achievement along the connectability dimension?

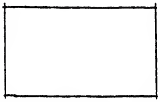
- Mode ? —

  a) Is there capacity of this mode available for the candidate group of clients and;

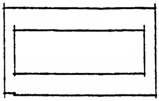
  b) Is the candidate group of clients acceptable to the management of the mode (relevant especially to residential accommodation e.g., are severely disabled clients or clients with behaviour disorders too disruptive for the routine of the home) and;

  c) Would the allocation of this mode to the group of clients provide value for money (a necessary question only in connection with domiciliary services - the cheapest of the three modes and therefore the last of the three public sector modes to be considered)?

4. Boxes



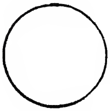
- A single box indicates where the feasibility and acceptability of the group of clients to the mode are questioned.



- A double box represents assignment to a mode (the position and height of the double boxes is intended to convey some indication of relative expense per recipient).

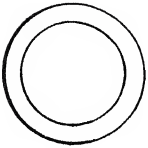
5. Circles

A circle indicates where a conflict occurs and a compromise is made.

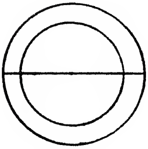


- Single circle. Conflict between achievement for a group of clients along specified dimensions in the sense that achievement of one dimension is at the expense of another (e.g., P+S v. C) implies that there must be some shortfall from adequate levels in achievement along physiological and security dimensions if connectablity is to be at an adequate level i.e., the choice has to be made between compromising on P+S or on C.

  The resolution of this conflict is determined essentially by the social worker, and does not necessarily involve any other public sector body - hence a single circle.



- Double circle. Conflict between achievement for a group of clients along the specified dimensions versus acceptability in practice to the specified body. When the specified body is the 'community' or 'friends and relatives', the resolution of the conflict is determined essentially by the social worker and does not necessarily involve any other public sector body.



- Divided double circle. As above for double circle but the resolution of conflict is determined essentially by individuals from more than one public sector organisational unit e.g., Res v. P+S where a compromise has to be found between the need for achievement along a group of clients' physiological and security dimensions - represented by the social worker - and the concerns of the residential home management (who may be in a position of power to decide what should happen unless higher authority i effective).

6. Connections

Connections (annotated with gains or losses) indicate possible paths, with direction shown by arrows.

- Two paths emerge from each question and in each case a bold line indicates the route to be taken if the answer to the question is no.

- Two paths emerge from each 'conflict circle'. They indicate the alternative routes that can be taken to resolve the conflict. In resolving the conflict, any compromises in dimensions, modes and/or expenditure for the SSD are shown. These signed symbols showing compromises are:

  a. Dimensions, a plus (+) or minus (-) sign following a dimension indicates a gain or loss (respectively) for a group of clients if this route is taken and not the alternative: a plus sign implies achievement at least at the adequate level, a minus sign implies a shortfall from this level.

  b. Modes, a minus sign following a mode shows where a particular mode compromises to accept a group of clients who, initially, are judged unacceptable by the mode (applied also to Com/F&R where Com/F&R- implies a compromise on the part of the 'community' or by 'friends and relatives' from their first preference).

  c. Expenditure for SSD, a £+ or £- sign indicates where there is increased or decreased (respectively) expenditure for the SSD if this route is taken and not the alternative.

Examples

Preliminary notes:

1. The state at any position refers to the group of clients' physiological (P), security (S) and connectability (C) dimensions and, in addition, any increase in SSD expenditure (£) as a consequence of the resolution of a conflict.

2. For P, S and C:

   - implies shortfall from adequate level;

   + implies achievement adequate along this dimension;

3. For £:

   + implies the more expensive alternative is taken;

   (+) implies the more expensive alternative is the allocation for subsequent consideration.

Example 1 - Group of clients characterised by moderate physical disability, little or no support from friends and relatives, no behaviour disorder.

NODE	COMMENTS	STATE AFTER NODE P	S	C	£
1. Start of allocation process.	P and S inadequate.	–	–	+	
2. Hosp ?P	No. Hospital not the least expensive mode for adequate achievement along the physiological dimension.	–	–	+	
3. Res ?P	Yes. Clients require residential care to provide adequate achievement along the physiological dimension.	+	–	–	
4. Res(P)?S	Yes. Residential accommodation provides 24 hour supervision.	+	+	–	
5. Res(P+S)?C	No. Clients would achieve better achievement along the connectability dimension in the community.	+	+	–	
6. Conflict: (P+S) v. C	Not able to provide adequate levels of achievement along the physiological and security dimensions with domiciliary care, so resolve to consider clients as candidates for residential care, say.	+	+	–	(+)
7. Res ?	Accept group of clients for residential care.	+	+	–	+

Example 2 - Group of clients characterised by behaviour disorder, no more than minor physical disability.

NODE	COMMENTS	STATE AFTER NODE P	S	C	£
1. Start of allocation process	S inadequate	+	-	+	
2. Hosp ?P	No. As only minor physical disability	+	-	+	
3. Res ?P	No. As only minor physical disability	+	-	+	
4. Dom(P)?S	No. Home help can assist with minor physical disability but cannot provide adequate achievement along the security dimension for this group of clients because of their mental condition.	+	-	+	
5. Conflict S v.C	Resolve this conflict by opting to apply for residential care, say.	+	+	-	(+)
6. Res ?	No. Not accepted as clients would disrupt home, say.	+	-	+	(+)
7. Conflict Res v.(P+S)	Resolve this conflict by opting to apply for domiciliary care, say.	+	-	+	
8. Dom ?	No. Not accepted as services not adequate to support clients' mental condition, say.	+	+	-	
9. Conflict: Com/F&R v. C	Resolve this conflict by opting to apply for residential care as the clients cannot be supported in the community or with friends and relatives so it seems more appropriate to lose acceptable connectability.	+	+	-	(+)
10. Res ?	See 6. above	±	+	-	(+)

Thus the group of clients is in danger of going round and round the system; eventually this has to be resolved either in residential accommodation with the clients in the state + + - (+) and the residential home in the state Res-, or in the community with the clients in the state + - + and no extra SSD expenditure, and the community/friends and relatives with a burden.

APPENDIX 2

SUB-GROUPS AND THEIR ESTIMATED SIZES

A.2.1 Introduction

The method used in this report to distinguish sub-groups of the elderly is based on work done previously by Arthur Andersen & Co. and others under the auspices of the DHSS ("Balance of Care", (Ref. 4)). This appendix describes:

- The factors used to classify the elderly.
- The development of sub-groups comprising elderly people with particular combinations of these factors.
- The estimation of the sizes of these sub-groups.
- The adjustment of the sub-group sizes in the four authorities to reflect their differing proportions of pensioners living alone.
- The adjustment of the sub-group sizes in the four authorities to reflect their differing age structures.

A.2.2 The factors used to classify the elderly

The factors used to classify the elderly were physical disability, incontinence, mental state, environmental circumstances and housing. The levels of each of these factors were as follows:

1. PHYSICAL DISABILITY

The categorisation considers ability to perform particular tasks to give the following levels of physical disability:

(i) Severe - chairfast, bedfast or unable to eat and drink without help

(ii) Moderate - not severe but unable to undertake personal care tasks (e.g. unable to do one or more of dressing, washing hands and face, preparing light snacks or combing hair) and some household tasks

(iii) Minor - not severe, able to undertake personal care tasks but unable to undertake some household tasks (e.g. unable to do one or more of cooking main meals, washing all over, shopping or light household cleaning)

(iv) None - able to undertake personal care and household tasks.

2. INCONTINENCE

(i) Incontinent

(ii) Continent.

3. MENTAL STATE

(i) Dementia with behaviour disorders

(ii) Dementia with no behaviour disorders

(iii) No dementia.

4. ENVIRONMENTAL CIRCUMSTANCES

The categorisation considers the degree of support from friends or relatives:

(i) Little or no support from friends or relatives

(ii) Substantial support from friends or relatives.

Note

'Substantial' support is defined as 'operational' support, such as assistance with personal care or cleaning or in the collection of pension and shopping; the presence of such support reduces but does not necessarily eliminate a client's requirement for help from health and social services. It is estimated, from statistics available in Audrey Hunt's survey (Ref. 5), that up to one half of those clients in any sub-group with substantial support could receive sufficiently intensive support from friends or relatives so as to require no services at all.

5. HOUSING

The categorisation considers the impact of the current housing conditions on the requirement for services:

(i) Inadequate - alternative housing could reduce the requirement for services

(ii) Adequate - alternative housing would not reduce the requirement for services.

A.2.3 The development of sub-groups comprising elderly people with particular combinations of these factors

The 10 sub-groups distinguished in this report are defined as follows:

Table A.2.1 – Definition of sub-groups

Sub-group	Level of classification factor				
	Physical disability	Environmental circumstances	Mental state	Incontinence	Housing conditions
1	Severe	any	dementia and behaviour disorders	any	any
2	Severe	little or no support	dementia or OK	any	any
3 a)	Severe	substantial support	dementia	any	any
				or	
b)			OK	incontinent	any
4	Severe	substantial support	OK	OK	any
5	Moderate	any	dementia and behaviour disorders	any	any
6	Moderate	little or no support	dementia or OK	any	any
7	Moderate	substantial support	dementia or OK	any	any
8 a)	Minor	little or no support	dementia	any	any
				or	
b)			OK	incontinent	inadequate
			or		
c)	Minor (unable to perform any household tasks	little or no support	OK	incontinent	adequate
					or
d)				continent	inadequate
9 a)	Minor	little or no support	OK	continent	adequate
			or		
b)	Minor (able to perform at least one household task)	little or no support	OK	incontinent	adequate
					or
				continent	inadequate
10 a)	Minor	substantial support	any	any	any
			or		
b)	None	any	any	any	any

In this report, the sub-groups with severe or moderate physical disability (sub-groups 1-7) are collectively referred to as the 'highly dependent' and the sub-groups with minor or no physical disability (sub-groups 8-10) as the 'less dependent'.

The 'high public sector dependency' (HPSD) group comprises sub-groups 1-9 and the 'low public sector dependency' (LPSD) group comprises sub-group 10.

A.2.4 The estimation of the size of the sub-groups

The majority of elderly people do not receive regular services from social services departments. When estimating sub-group sizes, it is necessary to distinguish between the demand for services, expressed in the group of elderly clients known to a social services department and the potential requirement for services. This involves obtaining estimates for the sizes of the sub-groups which are independent of the current provision of services in the selected authorities.

Two data sources have been used to provide information for this exercise, Audrey Hunt's survey (Ref. 5) and the "Balance of Care" projects in two authorities (1981). The Hunt study is a DHSS survey concerning the capabilities and difficulties of elderly people in the community. The "Balance of Care" project is an analysis of the characteristics of the elderly clients receiving either health or social services care. The size estimates obtained from both sources are intended only as very approximate guides to assist the analysis in the main text - more precise figures are not required for this analysis.

The method used to calculate the size of each sub-group is as follows:

Step No.	Description	Data Source
1	Calculate numbers for each level of physical disability: - severe - moderate - minor - none	National data Audrey Hunt Balance of care
2	Estimate sizes of all sub-groups characterised by severe physical disability	Balance of care
3	Estimate sizes of all sub-groups characterised by moderate physical disability	Balance of care
4	Estimate proportions of those with minor physical disability according to: - degree of support - incontinence - mental state - housing conditions	Balance of care

5	Estimate proportions of those with minor physical disability according to ability to perform household tasks	Balance of care
6	Estimate sizes of all sub-groups characterised by minor physical disability	Steps 1,4,5
7	Estimate size of sub-group 10 comprising those with minor physical disability but substantial support and those with no physical disability	-

The calculations were as follows:

Step 1

Table A.2.2 - The environment in which elderly people live (per 1000 elderly)

	Living Environment			
Degree of physical disability	Hospital (i)	Residential home (i)	Community (ii)	Total
Severe	5	2½	9½	17
Moderate	3½	12	15½	31
Minor	1	2	95	98
None	½	½	853	854
	10	17	973	1000

Notes:

(i) Estimated from the two "Balance of Care" surveys by taking the average proportions of elderly in the care setting for each degree of physical disability and weighting them to sum to the national average provision of that care setting.

(ii) Estimated using data from the Hunt community survey as follows:

% with severe disability = % who cannot move around the house unaided

= 1%

% with moderate physical disability = % who cannot prepare light meals - 1% above

= 2.6% - 1.0%

= 1.6%

Step 2

Table A.2.3 - Sizes of sub-groups with severe physical disability

Sub-group number	Percentage of those with severe physical disability in sub-group (i)	Estimated sub-group size per 1000 elderly (ii)
1	25	4.2
2	16	2.8
3	30	5.1
4	29	4.9
	100	17.0

Notes:

(i) Estimated from the average of the two "Balance of Care" surveys.

(ii) Column 2 weighted to sum to 17.

(iii) Because the total size of sub-groups 1-4 is fixed at the estimated national average of 17 and the two "Balance of Care" surveys only are used to estimate the relative sizes of the four sub-groups, the estimates obtained are not dependent on the age structure of the elderly in the two surveys. Allowance for variations in the level of support is made in A.2.5.

Step 3

Table A.2.4 - Sizes of sub-groups with moderate physical disability

Sub-group number	Percentage of those with moderate physical disability in sub-group (i)	Estimated sub-group size per 1000 elderly (ii)
5	15½	4.8
6	26	8.1
7	58½	18.1
	100	31.0

Notes:

(i) Estimated from average of the two "Balance of Care" surveys.

(ii) Column 2 weighted to sum to 31.

(iii) Because the total size of sub-groups 5-7 is fixed at the estimated national average of 31 and the two "Balance of Care" surveys are only used to estimate the relative sizes of the three sub-groups, the estimates obtained are not dependent on the age structure of the elderly in the two surveys. Allowance for variations in the level of support is made in A.2.5.

Step 4

Table A.2.5 - Proportions of elderly in the community with particular characteristics

Classification factor	Proportions
Degree of support	46% - little or no support (i)
Incontinence	13% - incontinent (ii)
Mental state	6% - dementia (ii)
Housing	31% - inadequate housing (iii)

Notes:

(i) The percentage of elderly in the community who receive less than one visit a week from relatives (Hunt).

(ii) Average of various community surveys (as reported by S.H. Taylor, (Ref. 4 (iv)).

(iii) From one of the "Balance of Care" surveys.

(iv) In deriving the proportions in the table, community surveys rather than the "Balance of Care" surveys were used where possible because many elderly with minor or no physical disability do not receive services (and therefore would not be included in the "Balance of Care" surveys).

% with minor physical disability = % who cannot go out unaided
- 2.6% above
= 12.4% - 2.6%
= 9.8%

% with no physical disability = 100% - 12.4%
= 87.6%

(v) In the initial estimation of sub-group sizes characterised by minor physical disability, the assumption is made that the percentages in the table are constant across the country. This is a natural assumption for incontinence and mental state. The housing classification factor is only used to distinguish between sub-groups 9 and 10 and variations in the prevalence of inadequate housing will have little effect on the estimated sizes of these sub-groups (a 1% change alters the estimated size by ½%). Variations in the level of support have been allowed for using statistics for the proportion of pensioners living alone (see A.2.5).

Step 5

In one of the "Balance of Care" surveys, 14½% of those with minor physical disability could not perform any of the three household tasks.

Step 6

Table A.2.6 - Sizes of sub-groups with minor physical disability

Sub-group number	Physical disability (15% unable to perform any of the household tasks)		Support (46% little or none)		Mental state (6% demented)		Incontinence (13% incontinent)		Housing (13% inadequate)		Proportion of those with minor physical disability		Estimated size of sub-group (per 1000 elderly)
8.	a) 1.00	x	0.46	x	0.06	x	1.00	x	1.00	=	0.0276		
	b) 1.00	x	0.46	x	0.94	x	0.13	x	0.31	=	0.0174		
	c) 0.15	x	0.46	x	0.94	x	0.13	x	0.69	=	0.0058		
	d) 0.15	x	0.46	x	0.94	x	0.87	x	0.31	=	0.0175 ------		
											0.0683 ======	0.0683	6.7
9.	a) 1.00	x	0.46	x	0.94	x	0.87	x	0.69	=	0.2596		
	b) 0.85	x	0.46	x	0.94	x	0.13	x	0.69	=	0.0330		
	c) 0.85	x	0.46	x	0.94	x	0.87	x	0.31	=	0.0991 ------		
											0.3917 ======	0.3917	38.4
10.	a) 1.00	x	0.54	x	1.00	x	1.00	x	1.00	=	0.5400 ======	0.5400 ------	52.9 ----
												1.0000 ======	98.0 ====

(i) Using definitions of sub-groups from table A.2.1 and proportions with each classification factor from table A.2.5.

Step 7

From step 1, an estimated 85.4% have no physical disability. Therefore the estimated size of sub-group 10 is given by 854 + 53 (the estimated number of people with minor physical disability and substantial support from friends or relatives - sub-group 10a from table A.2.6) i.e. a total of 907/1000 elderly.

Note on variation of sub-group sizes

The reference framework estimates for hospital and residential care set out in chapters 8 and 9 are dependent on the sub-group sizes estimated in this appendix. Reference to the variation between the numbers of elderly receiving services in the two "Balance of Care" surveys suggests that confidence intervals for the sizes of each of the sub-groups with severe or moderate physical disability (sub-groups 1-7) are about ± 20% of the sub-group size. Equivalent data is not available for the sub-groups with minor or no physical disability (sub-groups 8-10) but variations of ± 20% would only affect the reference framework for residential care by ± 1½ places/1000 elderly and the reference framework for hospital care not at all. It follows from the above that the lower and upper ends of the reference frameworks could vary by ± 20% due to the confidence intervals of ± 20% in estimated sub-group sizes.

A.2.5 Adjustment of sub-group sizes for proportion of pensioners living alone

The proportion of pensioners living alone in an authority will affect the proportion of the elderly who receive substantial support from friends or relatives. To allow for this factor in the four authorities, the sub-group sizes estimated in A.2.4 are adjusted as follows:

1. % of pensioners living alone in England = 24%

2. % of elderly with little or no support from friends or relatives (section A.2.4, step 4) = 46%

3. Assume that all pensioners living alone receive little or no support from friends or relatives

4. Therefore, % of total elderly who live with others and receive little or no support from friends or relatives = (46-24) = 22%

5. Therefore, % of elderly living with others who receive little or no support from friends or relatives = $\frac{100 \times 22}{(100-24)}$ = 29%

6. Therefore, % with little or no support from friends or relatives:

   = % living alone + 0.29 x % living with others

   = % living alone + 0.29 x (100% - % living alone)

   = % living alone + 29% - 0.29 x % living alone

   = 0.71 x % living alone + 29%

Applying this calculation to the four authorities:

Table A.2.7 - Changes to sub-group sizes for proportion of pensioners living alone

Authority	% pensioners living alone	% with little or no support from friends or relatives	Adjustment factor (i)
A	26	47½	1.03
B	36	54½	1.18
C	23	43½	0.97
D	32	51½	1.12

Note:

i) Ratio of authority to national average sub-group sizes, for sub-groups with little or no support from friends or relatives - Column 3 - 46 (national average).

7. Adjust the estimated size of the sub-groups in each authority as follows:

- adjust the size of those sub-groups with little or no support from friends or relatives by the percentage changes from the table above
- keep constant the size of those sub-groups which are independent of degree of support
- adjust the size of those sub-groups with support from friends or relatives by keeping the total number of elderly with the same degree of physical disability constant.

Applying these calculations to the four authorities:

Table A.2.8 - Estimated sub-group sizes adjusted for proportion of pensioners living alone

Sub-group number	National average (i)	Authorities			
		A	B	C	D
1.	4.2	4.2	4.2	4.2	4.2
2.	2.8	2.9	3.3	2.7	3.1
3.	5.1	5.0	4.8	5.2	5.3
4.	4.9	4.9	4.7	4.9	5.0
5.	4.8	4.8	4.8	4.8	4.8
6.	8.1	8.3	9.6	7.9	9.1
7.	18.1	17.9	16.6	18.3	17.1
8.	6.7	6.9	7.9	6.5	7.5
9.	38.4	39.6	45.3	37.2	43.0
10.	906.9	905.5	898.8	908.3	900.9
	1000.0	1000.0	1000.0	1000.0	1000.0

Notes:
(i) From tables A.2.3, A.2.4 and A.2.6.

A.2.6 Adjustment for age structure

Because many elderly people aged 65-74 do not receive services, the proportion of the elderly aged 65-75 in an authority will affect the requirement for services and thus the estimated group sizes. To allow for this factor in the four authorities, the sub-group sizes estimated in A.2.5 are adjusted as follows:

1. Figures from "Community Care" (Ref. 1) indicate the following:

Table A.2.9 - Proportion of elderly receiving residential care and home help

	In residential care (/ 1000)	Receiving home help (/ 1000)
Proportion of elderly aged 65-74	4.64	47.8
Proportion of elderly aged 75 and over	37.37	175.3
Proportion of elderly aged 65 and over	16.98	95.9

2. From CIPFA statistics (1980-81 actuals), the proportions of the elderly aged 65-74 and 75 and over are as follows:

Table A.2.10 - % of elderly by age group

	Authority			
	A	B	C	D
% elderly aged 65-74	60.7	58.3	64.4	58.8
% elderly aged 75 and over	39.3	41.7	35.6	41.2
Total	100.0	100.0	100.0	100.0

3. Combining the national rates of utilisation with the age structure of each authority provides an estimate for the rates of utilisation in each authority equivalent to the national rates of utilisation. Dividing these standardised rates by the national rates gives the percentage difference. These calculations for the authorities are as follows:

Table A.2.11 - Adjustment factor for residential provision (places) due to age structure

Authority	Adjusted level of residential provision	National level of residential provision	Adjustment factor
A (.393 x 37.37) + (.607 x 4.64)	= 17.5 ÷	17.0	= 1.03
B (.417 x 37.37) + (.583 x 4.64)	= 18.3 ÷	17.0	= 1.08
C (.356 x 37.37) + (.644 x 4.64)	= 16.3 ÷	17.0	= 0.96
D (.412 x 37.37) + (.588 x 4.64)	= 18.1 ÷	17.0	= 1.07

Table A.2.12 - Adjustment factor for home help provision (number of recipients) due to age structure

	Adjusted number of recipients	National number of recipients	Adjustment factor
A (.393 x 175.3) + (.607 x 47.8) =	97.8 ÷	95.9	= 1.02
B (.417 x 175.3) + (.583 x 47.8) =	100.7 ÷	95.9	= 1.05
C (.356 x 175.3) + (.644 x 47.8) =	93.0 ÷	95.9	= 0.97
D (.412 x 175.3) + (.588 x 47.8) =	100.7 ÷	95.9	= 1.05

4. Assume that the percentage change in the size of the sub-groups with severe and moderate physical disability is the same as the percentage change in the rate of utilisation of resential care and that of the minor physical disability the same as that of home help.

Applying this calculation to the adjusted sub-group sizes for each authority derived in A.2.5. gives the following estimated sub-group sizes for each authority adjusted for the proportion living alone and age structure:

Table A.2.13 - Estimated sub-group sizes/1000 elderly aged 65 and over

Sub-group number	Authorities			
	A	B	C	D
1	4.3	4.5	4.0	4.5
2	3.0	3.6	2.6	3.3
3	5.2	5.2	5.0	5.7
4	5.0	5.1	4.7	5.4
5	4.9	5.2	4.6	5.1
6	8.5	10.4	7.6	9.7
7	18.4	17.9	17.6	18.3
8	7.0	8.3	6.3	7.9
9	40.4	47.6	36.1	45.2
10	903.3	892.2	911.5	894.9
Total	1000.0	1000.0	1000.0	1000.0

A.2.7 Summary of sub-group size estimates

In summary, the sub-group size estimates calculated in Sections A.2.4, A.2.5 and A.2.6 are as follows:

Table A.2.14 - Summary of sub-group size estimates/1000 elderly

Sub-group number	Estimated size of sub-groups for England and Wales	Estimated sizes of sub-groups adjusted for proportion of pensioners living alone				Estimated sizes of sub-groups adjusted for proportion of pensioners living alone and age structure			
		A	B	C	D	A	B	C	D
1	4	4	4	4	4	4½	4½	4	4½
2	3	3	3½	2½	3	3	3½	2½	3½
3	5	5	5	5	5½	5	5	5	5½
4	5	5	4½	5	5	5	5	4½	5½
5	5	5	5	5	5	5	5	4½	5
6	8	8½	9½	8	9	8½	10½	7½	9½
7	18	18	16½	18½	17	18½	18	17½	18½
8	6½	7	8	6½	7½	7	8½	6½	8
9	38½	39½	45½	37	43	40½	47½	36	45
10	907	905	898½	908½	901	903	892½	912	895
	----	----	----	----	----	----	----	----	----
	1000	1000	1000	1000	1000	1000	1000	1000	1000

NORMALISATION OF AUTHORITY STATISTICS

The total amounts of expenditure incurred and resources provided by authorities are necessarily related to the numbers of elderly people served by those authorities. For comparison between authorities, therefore, it is necessary to normalise both authorities' expenditure and resource provision (i.e. to a common basis). The majority of figures presented in this report are therefore stated "per thousand elderly" (either aged 65 or over, or aged 75 or over) - the reference framework is similarly presented.

In normalising each authority's data for the differences that exist in the populations of elderly people, the study team has taken the data for each authority from tables 4.1 and 4.2 (or, where necessary, the more detailed data on which these tables are based) and divided by the relevant population (i.e. the number of people in each authority in the relevant age range). The population figures used are those in use by the authorities themselves, for planning purposes, at the time of the study team's visit (and subsequently presented in each authority's factual report, described in chapter 2). The resulting data has not been compared by the study team with corresponding data computed to reflect the results of the 1981 Census published subsequent to these authority visits.

UNIT COSTS

Unit costs used within this report are computed from two different sources:

i) Authority unit costs

- computed from the detailed data underlying the expenditure and resources provided by authorities presented in tables 4.1 and 4.2, and summarised below in table A.4.1
- differences in authority unit costs evident from table A.4.1 are discussed, by resource, in chapters 9-13, and for home help in more detail in appendix 8
- authority unit costs are utilised in the computation of the extent of differences in total expenditure on the elderly between authorities that arise from differences in price levels, detailed in appendix 9.

Table A.4.1. - Gross costs per unit of service

Service	Authority			
	'A'	'B'	'C'	'D'
Residential care in SSDs' own homes (per resident week) (i)	£104.1	£105.6	£69.9	£74.8
Home help (per contact hour) (ii)	*	3.4	2.4	2.5
Meals-on-wheels (per meal) (iii)	1.7	1.7	1.1	1.0
Lunch clubs (per meal) (iv)	0.9	1.3	0.8	0.7

Source: detailed data underlying the expenditure and resources provided in each authority given in tables 4.1 and 4.2

Notes:
(i) from table 9.15
(ii) from table 10.10, * data not available from authority 'A'
(iii) from table 12.5
(iv) from table 12.6

ii) Standard unit costs

- computed as the average for all authorities in England and Wales from expenditure and resource data provided in CIPFA Personal Social Services statistics (1980-81 actuals), except for the cost associated with the provision of day care (with/without transport), lunch clubs, visiting wardens and sheltered housing not shown separately in the CIPFA statistics; the average unit cost for each of these resources has been computed as the average of data available from the authorities visited; these costs are summarised below in table A.4.2

- standard unit costs are utilised in the computation of the various expenditure figures included in the summary of this report in the context of a 'typical - sized authority'

- standard unit costs are also utilised in the computation of the extent of differences in total expenditure on the elderly between authorities that arise from differences in price levels, detailed in appendix 9; the further analysis in appendix 9 of the amounts of the segregation of total community expenditure is also performed on the basis of these standard unit costs.

Table A.4.2. - Average net costs p.a. per unit of service

Service	Net cost p.a. (£)
Residential care (per place)	2,880
Home help (per FTE)	3,910
Day care with transport (per place)	2,070
Meals-on-wheels (1 meal every week)	40
Day care without transport (per place)	410
Lunch clubs (1 visit every week)	30

Note: The net cost p.a. of an intensive community care package (as an alternative to hospital or residential care) has been taken to be £1,400 - the average of packages I and II in Chapter 6, less the cost of the short-stay residential provision in those packages.

ANALYSIS OF HOSPITAL PROVISION

A.5.1 Introduction

This appendix explains the derivation of statistics on the provision of hospital beds for long-stay elderly patients. It derives:

- an implied DHSS guideline;
- an estimated national average provision;
- the estimated available provision in the four authorities taking into account the effects of patient flow.

Statistics are not readily available on elderly patients occupying hospital beds because data is collected primarily by hospital specialty and not by patient age-group. The main specialty concerning the elderly is the geriatric specialty although some authorities make substantial provision available within the mental illness or psychiatric specialties. However, not all geriatric beds are used by long-stay patients since some admissions are for acute treatment or short-stay care only. Clearly the admission of patients into the geriatric specialty for acute treatment will reduce the number of beds available for long-stay patients in that specialty. This is somewhat offset by long-stay elderly patients occupying acute beds.

In order to obtain the most appropriate data for the purposes of the report, the study team requested a special analysis from each of the four authorities visited. Three of the authorities were able to provide this analysis and the study team used alternative data for the fourth authority.

A.5.2 An implied DHSS guideline

The DHSS guideline for the provision of beds for geriatric and elderly severely mentally infirm inpatients is shown below:

Table A.5.1 - DHSS guidelines for hospital provision

Inpatients	DHSS guideline for 1983 for the level of provision of available beds per 1000 persons aged 65 years and over
Geriatrics	10
Elderly severely mentally infirm	2½ - 3

Source: 'The Way Forward', (Ref. 9).

Of the 10 beds/1000 guideline for geriatrics, 3 beds/1000 are for patients requiring acute treatment. The compensating effects of the mentally infirm and of those receiving acute treatment or short-stay care lead the study team to assume an implied guideline for the provision of long-stay beds for elderly inpatients as about 10 beds/1000.

A.5.3 An estimated national average

The 1981 'Hospitals and Health Services Year Book' (Ref. 3) states the number of available beds in the geriatric and mental illness specialties in 1978 were 56,000 and 84,000 respectively. Using CIPFA Personal Social Services statistics, 1978-79 actuals to provide population data, this corresponds to the following provision per head of the elderly population:

Table A.5.2 - Available beds in the geriatric and mental illness specialties

Specialty	Number of available beds per head of the population aged 65 years or over in England
Geriatric	8
Mental illness	2(i)
Total	10

Note:

(i) It is assumed that the proportion of mental illness beds used by the elderly is the same as the proportion of elderly in the total population.

The total provision of 10 beds/1000 is the same as the illustrative projection for 1978/79 available geriatric and elderly severely mentally infirm beds used in 'The Way Forward'.

This total includes provision for short-stay elderly patients. If the assumption is made that this short-stay provision is offset by a similar number of long-stay elderly patients occupying beds outside these two specialties, then the estimated national average for the total provision of hospital beds for long-stay elderly patients remains unchanged at around 10 beds/1000 - the same as the figure for the implied DHSS norm. The data available from authorities 'A', 'B', and 'D' supports this assumption. (In authority 'A' the provision of beds in the geriatric and mental illness specialties, which was less than the implied DHSS norm of 10 beds/1000, under-estimated the number of long-stay elderly patients. In authority 'D', where the provision was greater than the implied DHSS norm, this provision was found to over-estimate the number of long-stay elderly patients. There was no over- or under-estimation in authority 'B' where the provision of beds is similar to the implied DHSS norm).

5.4 Available provision in the four authorities

The special analysis mentioned in the introduction to this appendix was carried out in authorities 'A', 'B' and 'D'. It provides estimates for the number of long-stay elderly patients in these authorities as shown below:

Table A.5.3 - Number of long-stay elderly patients in hospital care per 1000 population aged 65 years over (i)

Authority		
'A'	'B'	'D'
5½	9½(ii)	8

Notes:

(i) Long-stay patients are considered, for the purposes of this analysis, to have been in hospital for one month or longer. In authorities 'A' and 'B', where further more detailed analysis could be performed, it was found that about one third of geriatric patients had been in hospital care less than one month. This is consistent with the DHSS guideline that allocates 3 out of 10 beds/1000 for the acute treatment of geriatrics.

(ii) This figure includes an estimated 2½/1000 elderly patients in a hospital for the mentally ill outside the area.

Authorities 'A', 'B' and 'C' are not coterminous with health authorities. The beds/1000 here and for subsequent tables are obtained for each health authority which overlaps a local authority and an average figure calculated.

To obtain an estimate for the number of long-stay elderly patients in hospital in authority 'C', the provision of beds in the geriatric and mental illness specialties is considered. In authorities 'A' and 'B' this provision is similar to the number of long-stay elderly patients quoted in table A.5.3. Since authority 'C' provides a number of beds in the geriatric and mental illness specialties (5½ beds/ 1000), which lies between the equivalent provisions for authorities 'A' and 'B', it is assumed that there are in fact around 5½/1000 long-stay elderly patients in hospital in authority 'C'.

Some elderly patients may receive hospital treatment outside their area of residence whilst some non-residents may also be treated inside the authority. Statistics were collected on patient flow within the geriatric specialty. There was a net outflow of patients from each authority as follows:

Table A.5.4 - Net outflow of geriatric patients expressed as a percentage of the total number of patients treated in the area

Authority			
'A'	'B'	'C'	'D'
11%	<1%	28%	<1%

If the provisions are adjusted accordingly, the revised provision available to residents in each authority is as shown below:

Table A.5.5 - Estimated available provision of long-stay beds/1000 elderly aged 65 years or over adjusted for patient flow

Authority			
'A'	'B'	'C'	'D'
6	9½	7½	8

Source:

Tables A.5.3 and A.5.4.

SURVEYS ON THE HOME HELP SERVICE AND THE ANALYSIS OF DATA COLLECTED

A.6.1 Introduction

Three surveys were carried out on the home help service in each of the authorities visited; a survey of home help timesheets and two questionnaire surveys on home help clients. This appendix describes:

- the timesheets survey
- the questionnaire surveys
- the questionnaire
- the analysis of the results from the questionnaire surveys
- the combination groups
- the 'high public sector dependency' group.

A.6.2 The timesheets survey

In order to determine the distribution of home help hours per week to clients, a survey of home help timesheets was conducted in each authority. The sample comprised one week's timesheets taken from 3 out of 6 areas in authority 'A', 2 out of 3 areas in authority 'B' and all the areas in authorities 'C' and 'D'.

When collating the data from the timesheets in authority 'B', it was found necessary to check whether clients had been visited by more than one home help in the week concerned (i.e. whether any client had been recorded as receiving home help on more than one timesheet). No such check was made in authorities 'A','C' and 'D'. Very few clients are actually allocated help from more than one home help in these three authorities but the situation might arise if an allocated home help is absent and his/her duties are distributed amongst covering home helps. During the weeks analysed, however, either the absence of home helps was negligible or an insignificant number of clients was covered by another home help in cases where the regular home help was absent.

A.6.3 The questionnaire surveys

The purpose of the two questionnaire surveys performed in each authority visited was to collect information on the characteristics of home help clients, the resources they receive and their environmental circumstances in order to allow various analyses to be performed. Subsequent analysis of the data enabled an understanding to be gained of the allocation of home help and of the overlap of home help with other resources. The data was collected on the same basis in each of the authorities visited and so facilitates comparison between authorities.

At each of the four authorities, questionnaires were completed at two or more areas and within each area two different samples were surveyed; one sample comprised all clients receiving substantial amounts of home help each week (referred to as the 'HD' survey) and the other was a random sample of the remaining clients (referred to as the 'LD' survey). A substantial amount of home help was interpreted as 6 or more hours per week (7 or more hours per week in authority 'C'). There were relatively few clients receiving these levels of home help and so they could all be surveyed to determine how their characteristics differed between authorities and differed from those receiving the lesser amounts of home help.

The questionnaire answers were obtained from interviews with the home help organisers or domiciliary services organisers in each authority. These organisers are involved in assessing the requirements for home help of a prospective client and the re-assessment of a current client's condition to monitor the appropriateness of the continuing care provided. The organisers referred to a client's record card to help answer any particular questions about which they were uncertain. The answers are therefore based on the opinions of the organisers and, to some extent, on their records.

A.6.4 The questionnaire

A copy of the questionnaire used is shown in Exhibit A.6.1. It is based on one used previously by two Area Health Authorities in the "Balance of Care" work carried out under the auspices of the DHSS and with which consultants from Arthur Andersen & Co were involved (Ref 4 (iv)).

The questionnaire is divided into four sections:

Section A: this section collects basic information on clients to determine their sex, age and matters relating to their initial referral.

Section B: this section provides information on the services received by clients and covers:

(i) the amount of home help supplied;
(ii) other local authority services provided;
(iii) additional services received from the local health authority.

Overlap statistics on resource usage were derived from this data.

Section C: this section collects data on clients' requirements for home help in terms of their physical disabilities.

Section D: this section details clients' environmental circumstances and provides information on support received from friends and relatives and the appropriateness of housing conditions. It also indicates whether clients are confused or incontinent.

The questions within sections C and D permit the clients surveyed to be organised into 10 categories according to their characteristics; subsequent analyses using the questionnaire are based on these categories. The 10 categories or combinations of them are described in appendix 2. Section A.2.3 shows the classification factors used for each of these categories. The derivation of each of these classification factors from the answers to the questionnaire is as follows:

- Physical disability:

  If the client was permanently bedbound or chairbound or could not eat or drink without assistance, he or she was classified as having a 'severe' physical disability; if he or she could perform those activities but could not do one or more of washing hands and face, dressing, preparing light snacks, shaving or brushing and combing hair, the client was classified as having a 'moderate' physical disability. Clients who could not perform one of: cooking main meals, washing all over, leaving the house alone or light household cleaning were classified as having a 'minor' physical disability If the client could perform all the above activities he or she was classified as having no specific physical disability.

- Environmental circumstances:

  If the client received substantial support from friends or relatives environmental circumstances were classified as 'supportive' otherwise the environmental circumstances were 'adverse'.

- Mental state, incontinence, housing conditions:

  Answers to single questions.

When developing the questionnaire, issues arose concerning the interpretation of some questions and in some instances, where a home help visited two persons living together, on whom to complete the questionnaire. They were resolved as follows:

- Question C1 (Bedbound/chairbound):

  If the client was able to reach the toilet from his/her bed or a chair then he/she was not considered bedbound or chairbound and the question was answered in the negative.

- Question C9 (Leave house alone):

  If the client could leave the house alone and collect at least some shopping then the question was answered in the affirmative.

- Question D2 (Support):

  The interpretation put on 'substantial' support was 'operational' support, such as assistance with cleaning or in the collection of pension and shopping; if the presence of support significantly reduced a client's requirement for home help (by obviating the need for a home help to clean the house or collect pension and shopping, for example), then this support was considered substantial.

- Question D3 (Housing):

  If the client's requirement for home help would be significantly reduced by alternative housing (because of a flight of stairs, for example) then the client's housing conditions were considered inadequate.

- All questions:

  If a home help visited two person living together, the questionnaire was completed on the person receiving most support from the home help.

A.6.5 The analysis of results from the questionnaire surveys

The data collected fom the two questionnaire surveys performed in each authority was:

1. categorised by sub-group;

2. adjusted for the effects of sheltered housing (authority 'B' only);

3. adjusted for the required classification of mental state as behaviour disordered, dementea or neither;

4. combined to form one survey and appropriately scaled to the size of the home help population.

Step

1. Categorisation by sub-group

   Using the sub-group definitions in appendix 2 and the questionnaire interpretations from section A.6.4, the data was categorised by sub-group.

   For the purposes of this step, if a questionnaire indicated that a client was confused, it was assumed to imply the client was:

   - behaviour disordered if he/she had a 'severe' or 'moderate' physical disability;

   - demented if he/she had a 'minor' physical disability.

   This assumption is made as the mental state indicated on the questionnaire is the presence or absence of confusion whilst the sub-group definitions in appendix 2 use classification factors of dementia and/or behaviour disorders.

   An adjustment for this assumption is made in step (iii).

2. Sheltered housing adjustment

   The classification of clients in sheltered housing as receiving substantial or insubstantial support from friends/relatives was not considered important when the surveys were conducted in authority 'B'. Subsequent classification required this information and so it was assumed that half the people in sheltered housing were receiving substantial support and the numbers and hours allocated accordingly.

   The consequence of this assumption is that authority 'B' has the lowest percentage of minor physically disabled clients supported by friends and relatives (about 5% less than the next lowest of the other three authorities).

Since nearly all the home help clients in sheltered housing had minor physical disability in authority 'B' and considering the arguments of section 14.2 relating to support from friends and relatives, this seems plausible.

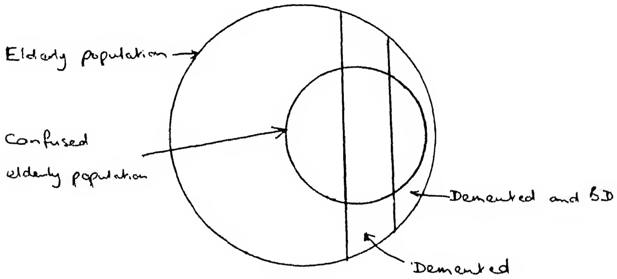
The allocations of numbers and hours were made separately for the 'LD' and 'HD' surveys in authority 'B'. For example, 4 clients receiving a total of 32 hours a week could have been classified as sub-group 9 or 10 dependent upon whether they are supported or not. Thus, 2 clients and 16 hours were allocated to each of sub-groups 9 and 10.

The questionnaire data for each authority from the two surveys (after the sheltered housing adjustment has been applied to authority 'B') is presented in table A.6.5 at the end of this appendix.

3. Mental state adjustment.

In step (i) an assumption is made about the mental condition of clients surveyed for purposes of initial categorisation. The questionnaire used by the study team noted only whether or not a client was confused. However, the sub-groups, and in particular sub-groups 1,5 and 8, are concerned about whether or not a client is demented and/or behaviour disordered.

These three mental states (behaviour disordered, demented and confused) are related as shown in the diagram below:



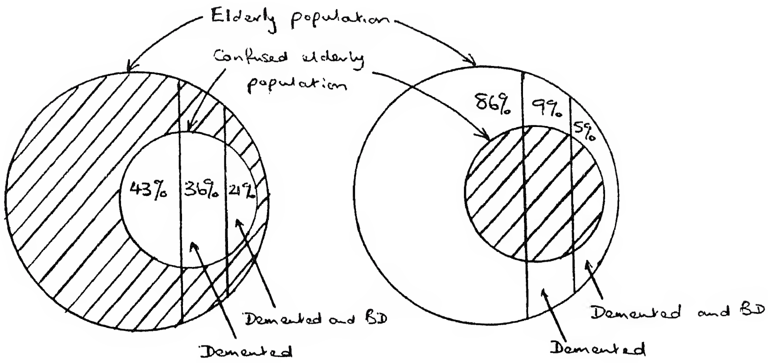
Notes:

(i) The area within the larger circle represents the elderly population.

(ii) The area within the smaller circle represents elderly persons who are confused. Persons who are elderly but not confused are represented by the area outside the smaller circle, but inside the larger one.

(iii) The two vertical lines split these circles into three sections. The right-most section represents elderly people who are demented and behaviour disordered; the central section represents elderly people who are demented; the left-most section represents elderly people who are neither demented nor behaviour disordered.

An Area Health Authority survey suggests these mental states are related in the following proportions:



Notes:

For example:

(i) about 21% of confused, elderly persons are demented with behaviour disorders.

(ii) about 86% of elderly persons who are not confused, are neither demented nor have behaviour disorders.

This information can be used to re-allocate data for example:

from/to sub-group 1 to/from sub-group(s) 2,3 and 4
" " " " 6 and 7
" " " " 9

For example, consider the results of an 'LD' or 'HD' survey (where an indication from the questionnaire that the client is 'confused' has been assumed, for initial categorisation purposes to imply 'behaviour disordered') for sub-groups 1,2,3 and 4 as follows:

Table A.6.1

Sub-group	Number of clients	Total number of hours per week
1	N1	H1
2	N2	H2
3	N3	H3
4	N4	H4

The assumption made was that 'confused' and 'behaviour disordered' are similar mental states. However, as diagram A.6.1 shows, only about

21% of confused persons are behaviour disordered and about 5% of behaviour disordered persons are confused. Hence the adjusted number of clients for sub-group 1 for example is then:

$$\left(\frac{21}{100}\right) N1 + \left(\frac{5}{100}\right)(N2 + N3 + N4)$$

The adjusted number of hours for sub-group 3, for example, is then:

$$\left(1 - \frac{5}{100}\right)H3 + \left(1 - \frac{21}{100}\right) H1 \times \left(\frac{N3}{N2 + N3 + N4}\right)$$

These adjustments, which must be applied to the numbers of clients and numbers of hours in sub-groups 1-9, are applied to both surveys separately for each authority. Table A.6.2 (over) provides a complete list of formulae. The figures in tables A.6.5 are adjusted with these formulae to obtain the equivalent figures in table A.6.6 at the end of this appendix.

4. Combination of surveys

The 'LD' and 'HD' surveys are on mutually exclusive populations; those receiving less than six hours home help per week and those receiving six or more hours home help per week (seven hours in authority 'C'). Together the two surveys sample the whole home help population in an authority. Combining these two surveys is only valid if they are appropriately weighted (or scaled) first to reflect their respective sampling fractions. In order to obtain results as from a 'single survey' on the whole home help population (see table A.6.6), the following method was adopted to combine the two surveys:

- scale the 'LD' survey to have the same sampling fraction as the 'HD' survey;
- add the results of the two surveys together, sub-group by sub-group, to produce a 'combined' survey;
- scale this 'combined' survey to bring it to a sampling fraction equivalent to 100% of the home help population.

This scaling enables coverage statistics to be derived using the sub-group sizes of appendix 2.

Table A.6.2

Mental condition adjustment

Sub-group	Number of clients	Total number of hours per week
1	N1	H1
2	N2	H2
.	.	.
10	N10	H10

Adjusted numbers of clients in sub-groups:

1:	$\left(\frac{21}{100}\right) N1 + \left(\frac{5}{100}\right) (N2 + N3 + N4)$
2:	$\left(1 - \frac{5}{100}\right) N2 + \left(1 - \frac{21}{100}\right)\left(\frac{N2}{(N2 + N3 + N4)}\right)(N1)$
3:	As for 2 with N2 replaced by N3 and with N3 " " N2
4:	As for 2 with N2 replaced by N4 and with N4 replaced by N2
5:	$\left(\frac{21}{100}\right) N5 + \left(\frac{5}{100}\right) (N6 + N7)$
6:	$\left(1 - \frac{5}{100}\right) N6 + \left(1 - \frac{21}{100}\right)\left(\frac{N6}{(N6 + N7)}\right) N5$
7:	As for 6 with N6 replaced by N7 and with N7 " " N6
8:	$\left(1 - \frac{43}{100}\right) N8 + \left(1 - \frac{86}{100}\right) N9$
9:	$\left(\frac{86}{100}\right) N9 + \left(\frac{43}{100}\right) N8$

Similar formulae are used to derive the adjustments for the total numbers of hours per week in the sub-groups.

Thus, the adjusted total number of hours per week in sub-group:

1: $\left(\frac{21}{100}\right) H1 + \left(\frac{5}{100}\right) (H2 + H3 + H4)$

and

2: $\left(1 - \frac{5}{100}\right) H2 + \left(1 - \frac{21}{100}\right) \left(\frac{N2}{(N2 + N3 + N4)}\right) (H1)$ etcetera

Note: Sub-group 10 remains unaffected by these adjustments since the mental state of a person in sub-group 10 has no effect on categorisation.

A.6.6 The combination groups

In chapter 10, the 10 sub-groups are combined to form 4 combination groups. These combination groups have been constructed, first, on the basis of whether the characteristics of a sub-group are such that at least some home help is necessary and, secondly, on the amount of time that the four authorities tend to give those members of a group who do receive any home help time.

Table A.6.3 summarises, for each authority, the average hours per week by sub-group for the 'LD' and 'HD' surveys.

Table A.6.3 – average hours home help per week by sub-group for the 'LD' and 'HD' surveys

Sub-group	Authority surveys								Authority summary			
	'A'		'B'		'C'		'D'					
	Survey		Survey		Survey		Survey					
	'HD'	'LD'	'HD'	'LD'	'HD'	'LD'	'HD'	'LD'	'A'	'B'	'C'	'D'
1	11	(3)	16	–	8	6	9	–	11	16	6	9
2	12	–	10	–	9	–	(10)	–	12	10	9	(10)
3	10	(3)	(8)	–	(8)	(4)	(6)	–	10	(8)	(4)	(6)
4	11	(2)	13	–	8	(3)	–	–	11	13	8	–
5	9	(3)	9	–	9	6	7	–	9	9	6	7
6	12	(4)	8	(3)	8	(6)	–	–	12	8	8	–
7	8	3	9	(0)	8	5	(11)	–	3	9	5	(11)
8	(8)	3	10	(2)	(8)	5	14	(5)	3	10	5	14
9	8	2	9	3	8	4	7	2	2	3	4	2
10	7	2	8	2	8	4	7	3	2	2	4	3

Source: Table A.6.6

Notes:

(i) Where fewer than 3 sampled clients were found in a category from either of the surveys in an authority, the average has been bracketed.

(ii) The summary column for each authority takes the most significant average of the two surveys. The process is as follows:

- take the 'LD' survey figure if it is not bracketed since this will dominate the combined result because of the scaling factor;
- if the 'LD' result is bracketed, take this if the 'HD' result is also bracketed (for the same reason as above);
- if the 'LD' result is bracketed but the 'HD' is not, take the 'HD' result, since it is more reliable.

This table can be further summarised as shown below:

Table A.6.4

Sub-group	Average hours/week
1	6 - 12
2	9 - 11
3	7
4	10½
5	6 - 9
6	8 - 10
7	7
8	3 - 10
9	2 - 3

Notes:

(i) For sub-groups 1,2,5,6,8,9, the lower figure quoted is the lowest found in the four authorities. The upper figure is the average of the three remaining figures since for these sub-groups, a 'minimum and an average variance from this 'minimum' are required.

(ii) For sub-groups 3,4, and 7, the figure quoted is the average of the results found in the four authorities since, for these sub-groups an average variance from the minimum of 0/3 hours home help per we is required.

The above table A.6.4 is used to derive the combination groups in table 10.5.

Table A.6.6 shows the average hours by combination group.

A.6.7 The 'high public sector dependency' group

The 'high public sector dependency' group (high PSD) comprises combination groups I, II and III. The numbers and hours in table A.6.6 are aggregated from these combination groups to provide the appropriate numbers and hours for the two PSD groups, i.e.

Table A.6.5

Combination group	PSD group
I) II) III)	High
IV	Low

The coverage/1000 by home help of each of these PSD groups is calculated by dividing the number of home help clients in the group (estimated from the 'combined' survey - scaled) by the authority's elderly population.

The percentage coverage by home help of each of the PSD groups is calculated by dividing the number of home help clients/1000 in a group by the number in that group remaining in the community (from appendix 2 after deducting the actual hospital and residential provision from the high PSD group).

Table A.6.6 shows the above calculations.

COVERAGE BY HOME HELP AND OTHER DOMICILIARY SERVICES

A.7.1 Introduction

The analysis required to determine the coverage by domiciliary services is based on an estimation of the size of the 'high public sector dependency' group in the community. This estimation is required for authorities 'B' and 'D'. The following steps outline how these estimates are derived and then the subsequent section explains how these figures are utilised to ascertain the coverage by domiciliary services in those authorities.

A.7.2 The size of the 'high public sector dependency' group in the community.

(See Table A.7.1)

Step	Calculation	Table A.7.1 Column
1.	Determine, the size of the 'high public sector dependency' group, sub-groups 1-9, adjusted for living alone and age structure differences.	2(i)
2.	Deduct the hospital and residential provision to determine the size of sub-groups 1-9 remaining in the community.	3-5(ii)

Notes:

i) Sub-group sizes are from Appendix 2.

ii) Col. 5 = col.2 - col.3 - col.4
The hospital provision is from table 8.2.
The residential provision is from table 9.2.
These provisions are allocated to sub-groups 1-9 according to the respective reference frameworks and methodologies set out in Chapters 8 and 9. The hospital provision is allocated first.

Table A.7.1 - The size of the 'high public sector dependency' group in the community - authorities 'B' and 'D' only.

Sub-group No.(1)	Revised sub-group sizes adjusted for proportion of pensioners living alone and age structure (2) (Number/1000 elderly population)	Hospital Provision (3) (Beds/1000 elderly population)	Residential provision (4) (Places/1000 elderly population)	Sub-group sizes remaining in the community (5) (Number/1000 elderly population)
Authority: 'B'				
1	4½	4½	-	-
2	3½	-	1½	2
3	5	5	-	-
4	5	-	-	5
5	5	-	5	-
6	10½	-	10½	-
7	18	-	-	18
8	8½	-	8½	-
9	47½	-	5½	42
Totals	107½	9½	31	67
Authority: 'D'				
1	4½	4½	-	-
2	3½	-	1½	2
3	5½	3½	-	2
4	5½	-	-	5½
5	5	-	3	2
6	9½	-	9½	-
7	18½	-		18½
8	8	-	8	-
9	45	-	-	45
Totals	105	8	22	75

A.7.3. The coverage of domiciliary services

The figures for authorities 'B' and 'D' required in table 14.3 and those used in the subsequent two paragraphs are:

i) those in the 'high public sector dependency' group in the community,

ii) those receiving day care (with transport) but not receiving home help,

iii) those receiving intensive support from friends and relatives,

iv) those who could receive district nurse and no other services,

v) those in sheltered housing but not receiving home help.

Each of these estimates is derived below:

i) Those in the 'high public sector dependency' group in the community:

	Authority	
	'B'	'D'
Size of 'high public sector dependency' group in the community (table A.7.1)	67/1000	75/1000

ii) Those receiving day care (with transport) but not receiving home help:

Authority 'B': 2/1000

- Number of clients receiving day care (with transport) is 5/1000; 60% also receive home help in one centre.
- Hence estimate 5/1000 x 40% = 2/1000 receive day care (with transport) and not home help.

Authority 'D': 3/1000

- An analysis carried out in authority 'D' of clients receiving domiciliary services showed approximately 1.5/1000 clients receiving day care without home help; The survey sampled about 55% of those receiving domiciliary services.
- Hence estimate $\frac{1.5/1000}{.55}$ = 3/1000 receive day care (with transport) and not home help.

iii) Intensive support

If nearly all of sub-groups 1 and 5 are assumed to be in hospital or in residential care in authorities 'B' and 'D' (this is the case if these services are allocated according to the reference frameworks and methodologies set out in chapters 8 and 9 - see table A.7.1), then the 'high public sector dependency' sub-groups receiving support from friends and relatives are sub-groups 3, 4 and 7, i.e. combination group II. It is estimated, from statistics available in Audrey Hunt's survey (Ref. 5), that one half of this group could receive sufficiently intensive support from friends and relatives to require no services at all. From appendix 2, this translates to 14/1000 in authority 'B' and 15/1000 in authority 'D'.

iv) District nurse

The remainder of combination group II (after deducting those receiving intensive support from friends and relatives) is both:

- supported by friends and relatives, and
- in need of personal care from some source.

The size of this remainder is:

Authority 'B': 23 - 14 = 9/1000 (from table A.7.1 and section (d) above)

Authority 'D': 26 - 15 = 11/1000 (as above)

In the argument of section 14.2, it is assumed that this group could receive day care or district nurse for personal care tasks with any assistance for non-personal care tasks being provided by support from friends and relatives. The maximum numbers that could, therefore, be receiving personal care from a district nurse and no other services are given by the remainders above less those receiving day care (from ii) above)-

Authority 'B' = 9 - 2 = 7/1000
Authority 'D' = 11 - 3 = 8/1000

v) Those in sheltered housing but not receiving home help:

Authority 'B': 6/1000

- The sheltered housing provision is 17 places/1000.
- 7 of those sampled in the questionnaire survey of home help clients receiving 6 or more hours/week of home help were in sheltered housing.

  14 of those sampled receiving less than 6 hours/week of home help were in sheltered housing.

  Using the scaling factors explained in appendix 6, these figures are equivalent to:

$$\frac{(7 + (14 \times 7.45)) \times 2.31}{23.2} = 11/1000$$

  in the population receiving home help and also in sheltered housing.

- Hence estimate 17-11 = 6/1000 are in sheltered housing but not receiving home help.

Authority 'D': 36/1000

- The sheltered housing provision is 49 places/1000.
- An analysis carried out in authority 'D' of clients receiving domiciliary services showed that 15% of those receiving home help are in sheltered housing.
- The home help provision is approximately 90 clients/ 1000, so 90 x 0.15 = 13/1000 receive home help and are in sheltered housing.
- Hence estimate 49-13 = 36/1000 are in sheltered housing but not receiving home help.

ECONOMY AND EFFICIENCY OF THE HOME HELP SERVICE

A.8.1 Introduction

The output of the home help service can be measured in terms of the number of contact hours provided - i.e. the number of home help hours actually spent with clients or working in their homes.

In order to provide these contact hours, social services departments incur expenditure on:

- the salaries and overheads of home help organisers/supervisors
- the wages and overheads of home helps themselves
- travel and other expenses.

Differences exhibited between authorities in the gross unit cost associated with the provision of home help (i.e. the gross cost per contact hour) will reflect differences in economy (e.g. in the cost incurred to employ an organiser or a home help) and differences in efficiency (e.g. in the number of organisers or home helps employed in order to provide the contact hours required). Differences exhibited between authorities in the net cost per contact hour will reflect both the above differences in gross cost, and also the extent to which clients are charged for home help provided or income is available from other sources (e.g. joint finance).

A.8.2 The effect of differences in economy and efficiency between the authorities visited.

A breakdown of the gross cost and income per contact hour for each of the authorities visited is presented in table A.8.1. Significant differences in gross costs occur in salaries and wages captions (most noticeably between the types of authorities) - the reasons for these differences are discussed in the notes to the table, as are the differences in income.

Table A.8.1. - Analysis of the gross and net cost per contact hour of the provision of home help

	Cost per authority per contact hour (£)			
	'A'	'B'	'C'	'D'
Supervisor time (i)	*	£0.31	£0.13	£0.22
Home help time (ii):				
- hour with client	2.21	2.26	1.80	1.79
- travelling time	0.15	0.27	-	0.02
- sickness	0.54	0.23	0.14	0.12
- holiday		0.27	0.25	0.25
Total home help time	£ 2.90	£3.03	£2.19	£2.18
Total employee costs	*	£3.34	£2.32	£2.40
Travel expenses	negligible	0.03	0.02	0.07
Other expenses	0.01	0.03	0.01	
GROSS COST	*	£3.40	£2.35	£2.47
Income from charges (iii)	-	£0.12	£0.09	£0.20
Joint finance	-	-	0.09	0.17
GROSS INCOME	-	£0.12	£0.18	£0.37
NET COST	£ *	£3.28	£2.17	£2.10

Notes:

(i) Supervisor time

(a) Economy: the average cost p.a. for a FTE organiser/supervisor in the authorities is:

Authority	£
'A'	*
'B'	9,000
'C'	5,900
'D'	5,600

* data was not readily available on the gross cost incurred in employing supervisory staff in authority 'A'.

The study team has not performed a detailed analysis of the reason for the approximately 55% extra cost per supervisor in authority 'B'. It is likely, however, that about 20% is accounted for by London Weighting and allowances; it is known also that:

- in authority 'B' home help is controlled and meals-on-wheels allocated by an organiser and assistant in each area, with clerical support (charged to administration), with a central co-ordinator;
- in authority 'C' home help is controlled and meals-on-wheels allocated by an organiser together with two assistants in each area (who perform clerical duties), with a central co-ordinator and assistant;
- in authority 'D' home help is controlled and meals-on-wheels allocated in patches by a number of domiciliary services organisers who in addition control the allocation of day care places, schedule the rotas for sheltered housing wardens and also for visiting wardens.

No attempt has been made, when calculating the average costs above, to allocate a proportion of the supervisors' time to duties other than control over the home help service.

(b) Efficiency: the number of FTE home helps supervised by each organiser in the authorities is:

Authority	FTE home help supervised
'A'	18.5
'B'	19.2
'C'	26.6
'D'	14.7

(c) Summary

The £0.09 difference in the supervisor element of total cost per contact hour between authorities 'D' and 'C' arises as follows:-

- extra cost of £0.10 per hour in authority 'D' owing to the higher ratio of supervisors:home helps

- marginally lower cost of employing a FTE supervisor in authority 'D'.

The £0.09 difference in the supervisor element of total cost per contact hour between authorities 'B' and 'D' arises as follows:-

- extra cost of £0.14 per hour in authority 'B' owing to the higher average cost of employing a FTE supervisor in authority 'B'

- lower cost by £0.05 per hour in authority 'B' owing to the lower ratio of supervisors:home helps.

(ii) Home help time

(a) Economy: the average cost p.a. for a FTE home help in the authorities is:-

Authority	£
'A'	4,600
'B'	4,700
'C'	3,700
'D'	3,700

The majority of the difference in average cost is explained by the London weighting and allowances paid in authorities 'A' and 'B' over the nationally agreed wage rate for home helps (c.£750).

Efficiency: analysis of the total number of home help hours paid for by local authorities gives the following insight:

	% of total home help hours spent			
Authority	with client	travelling	sick	on holiday
'A'	76.1%	5.3%	18.6%	
'B'	74.6%	9.0%	7.5%	8.9%
'C'	82.3%	-	6.3%	11.4%
'D'	82.0%	0.8%	5.5%	11.7%

(c) Summary

The £0.71/0.72 differences in the home help element of total cost per contact hour between authority 'A' and authorities 'C' and 'D' arise as follows:-

- 70% from the extra cost of employing a FTE home help in authority 'A'
- 30% from the relatively lower percentage of contact time per FTE in authority 'A'.

(The £0.84/0.85 differences in the home help element of total cost per contact hour between authority 'B' and authorities 'C' and 'D' arise similarly as for the difference between authority 'A' and authorities 'C' and 'D' above).

The £0.13 difference in the home help element of total cost per contact hour between authorities 'A' and 'B' arises as follows:-

- 50% from the extra cost of employing a FTE home help in authority 'B'
- 50% from the lower percentage of contact time per FTE in authority 'B'.

All of the authorities visited employed at least some home helps on the basis of a 'guaranteed working week' although all stated that such non-worked hours were, in their view, likely to be minimal.

(iii) Income from charges

Differences in the income per contact hour reflect the following differences in charging policy between authorities:-

- authority 'A' makes no charge for home help; the results of calculations performed by the authority suggested that the income which might be received from means-tested charges would approximate the costs incurred in employing staff to administer the charging policy;
- authorities 'B' and 'C' charge a means-tested rate per hour of home help provided; in authority 'B' the hourly rate is up to £2.52 and in authority 'C' up to £1.65. The percentage of clients charged from home help in authority 'C' approximates 20%; whilst similar data is not maintained by authority 'B', if the average charge per hour for home help as a percentage of the maximum is similar to that in authority 'C' then authority 'B' also makes a charge to approximately 20% of home help clients;
- authority 'D' makes a charge of £0.60 per week to all home help clients, irrespective of the number of hours help received.

ANALYSIS OF COMMUNITY EXPENDITURE

A.9.1 The method

This first half of this appendix provides an analysis of the total expenditure in the four authorities in order to determine, so far as the study team is able with the data available, the proportions of total expenditure accounted for by the following factors:

1. Unit cost variances:

    - differences in price level
    - differences in charges

2. Economic and demographic variances:

    - differences in age structure
    - differences in the proportion of pensioners living alone
    - differences in the level of long-stay hospital bed utilisation
    - differences in the method of funding expenditure on wardens for sheltered housing schemes (i.e. between SSDs and housing departments).

3. Variances due to differences in the levels of residential provision.

The second half of this appendix provides a breakdown of the total expenditure on community care, after standardisation for the factors above, in the following categories of expenditure:

- Expenditure required to provide a level of service such that the value provided by these services is worthwhile irrespective of cost:

    - Expenditure on the 'low public sector dependency' (LPSD) group

    - Expenditure on the LPSD group which is required to replace the estimated level of private services in authority 'B'

    - Expenditure on the 'high public sector dependency' (HPSD) group

    - Expenditure on the HPSD group which is required if the support from friends and relatives is not mobilised.

- Additional expenditure whose worthwhileness depends on local judgement concerning the value of additional services provided compared to the additional cost:

    - Additional expenditure on the LPSD group

    - Additional expenditure on the HPSD group

    - Additional expenditure not included above on either the LPSD or HPSD groups.

A.9.2 Unit cost variances

The steps in this calculation are as follows:

Step Number	Calculation
1.	Document the 1980-81 actual net expenditure in the authority
2.	Document the 1980-81 actual provision of services in the authority
3.	Calculate net expenditure adjusted for England and Wales average price levels (using CIPFA statistics (1980 - 81 actuals)) and compare with actual net expenditure to derive price level cost variance using the formulae:
4.	Calculate net expenditure adjusted for England and Wales average price levels and average income for each service (i.e. standard net unit costs using CIPFA statistics (1980-81 actuals)) and compare with previously calculated adjusted expenditure.

Formulae for step 3:

Net expenditure on service adjusted for price levels = actual provision

x (England and Wales gross unit cost - authority unit income)

Total net expenditure adjusted for price level = Actual net expenditure for each service adjusted for price level

Price level cost variance = Actual net expenditure in authority

- Adjusted net expenditure calculated above

The results of these calculations in the four authorities are as follows:

Table A.9.1 - Standardisation of net expenditure for differences in cost/income

	Net expenditure £'000s/ 1000 elderly aged 65 or over			
	'A'	'B'	'C'	'D'
Net expenditure (at actual net cost/income)	£182	£132	£104	£100
Cost variances - price level (v. E & W average)(i)	(24)	(9)	10	8
- income (v. E & W average)	(8)	(3)	1	4
Net expenditure (average E & W net cost/income)	£150	£120	£115	£112

Note:

(i) Both inner London authorities ('A' and 'B') incur substantial costs owing to the higher level of prices in inner London. The cost variance for authority 'B' is lower than for authority 'A' because it makes use of a substantial amount of voluntary residential accommodation.

A.9.3 Demographic variances

The standardisation for differences in demography between the authorities is performed as follows:

Step number	Calculation
1.	Document authority provision of services.
2.	Adjust authority provision for age structure.
3.	Adjust authority provision for proportion of pensioners living alone.
4.	Adjust authority provision for availability of NHS long-stay hospital beds.
5.	Multiply adjusted authority provision by standard unit costs (from A.9.2) to obtain adjusted expenditure.
6.	Adjust social services department expenditure for imputed sheltered housing expenditure.
7.	Calculate the variances due to each of the factors above.

The method used to perform these steps in each of the authorities was as follows:

1. Document authority provision of services

The provision figures for each authority are as set out in chapter 5. The home help provision was adjusted for the proportion of home help time devoted to the elderly.

2. Adjust authority provision for age structure

The adjustment factors for residential accommodation and home help (FTEs) are as set out in appendix 2.

The assumptions are made that, as a first approximation, the age distribution of clients in long-stay hospital beds for the elderly is similar to that of those in residential accommodation (83% of clients being aged 75 and over) and that the age distribution of clients attending day care with transport and those receiving meals-on-wheels are similar to that of those receiving home help. Thus, the same adjustment factor is used for hospital as for residential provision and the same adjustment factor is used for day care with transport and meals-on-wheels as for home help. It is assumed that differences in age structure will have little effect on the requirements for lunch clubs and day care without transport.

Any variations from the assumptions above in the age structure of clients receiving each service has little effect on the calculations.

3. Adjust authority provision for proportion of pensioners living alone

Average sub-group sizes and the sub-group sizes adjusted for the proportion of pensioners living alone in each authority were estimated in appendix 2. The effect on the requirement for services of changes in sub-group sizes is estimated using the reference framework set out in chapters 8-10 as follows:

- in the reference framework, the majority of people in sub-groups 6 and 8 are placed in residential accommodation and changes to the sizes of these two groups will affect the requirements for such accommodation;
- the majority of people in sub-groups 7 and 9 are in the community and changes to the sizes of these two groups will affect the requirements for home help - the amount by which it does so being determined using the average levels of home help provided to these sub-groups set out in table A.6.4.

For example, the calculations in authority 'A' were as follows:

Table A.9.2 - Adjustment of authority's provision of services for proportion of pensioners living alone

Sub-group	National sub-group size (i)	Authority sub-group size	Difference	Effect on residential requirement (places/1000)	Effect on home help requirement (hrs/wk/1000)
6	8	8½	(½)	(½)	-
7	18	18	-	-	-
8	6½	7	(½)	(½)	-
9	38½	39½	(1)	-	(1)x3=(3) (ii)
				(1)	(3)(iii)

Notes:

(i) From table A.2.14 - column 2.

(ii) The average level of home help for sub-group 9 is 3 hours per week (Appendix 6).

(iii) The requirement for home help in hours per week is converted to FTEs by dividing by 30 (i.e. the average number of contact hours per FTE).

4. Adjust provision for availability of NHS long-stay hospital beds

Adjusting the local NHS provision of long-stay hospital beds to the estimated national average of 10 beds /1000 aged 65 and over affects the number of people remaining in the community. The assumption is made that these people would otherwise be receiving an intensive community package (such as those described in chapter 6).

5. Multiply adjusted authority provision by standard unit costs to obtain adjusted expenditure

The standard costs are those from chapter 6, expressed in the appropriate units as £000's per annum. The assumption is made that the cost of the intensive community package is the average of packages I and II (excluding short-stay residential care) described in chapter 6.

6. Adjust social services department expenditure for imputed sheltered housing expenditure

The social services departments in authorities 'A', 'C' and 'D' pay for the resident wardens in sheltered housing; the social services department in authority 'B' does not. The cost that would be incurred by the social services department of authority 'B' in doing so is estimated by multiplying the average cost per place from the other three authorities by the number of places in authority 'B'.

The effects on the provision of services, and on the net expenditure incurred by the local authorities of performing the steps above are shown in tables A.9.3 - A.9.6 below.

Table A.9.3 - Adjusted levels of provision and expenditure - authority 'A'

Service	Actual 1980-81 net expenditure (£000's p.a. /1000 aged 65+)	Actual provision (/1000 aged 65 + (time of visit))	Adjustments: Age Structure	Adjustments: % pensioners living alone	Adjustments: NHS long stay hospital beds	Adjusted provision (/1000 aged 65+)	Standard net unit cost (£000's p.a.)	Adjusted net expenditure (£000's p.a. /1000 aged 65 +)
Residential	83	23.0	÷ 1.03	+ (1.0)	- =	21.3 x	2.88	= 62
Intensive community care package as alternative to hospital or residential care	0	0	-	-	+ (4.2) =	(4.2) x	1.40	= (6)
Home help	52	11.4	÷ 1.02	+ (0.1)	- =	11.1 x	3.91	= 43
Day care with transport	9	3.8	÷ 1.02	-	- =	3.8 x	2.07	= 8
Meals-on-wheels	13	183.0	÷ 1.02	-	- =	179.0 x	0.04	= 7
Day care without transport	10	25.0	-	-	- =	25.0 x	0.41	= 10
Lunch clubs	10	276.0	-	-	- =	276.0 x	0.03	= 8
Sheltered housing contribution	5	----	----	----	N/A	----	----	5
	182							137

Table A.9.4 - Adjusted levels of provision and expenditure - authority 'B'

Service	Actual 1980-81 net expenditure (£000's p.a. /1000 aged 65+)	Actual provision (/1000 aged 65 + (time of visit))	Adjustments Age Structure	% pensioners living alone	NHS long stay hospital beds	Adjusted provision (/1000 aged 65+)	Standard net unit cost £000's p.a.	Adjusted net expenditure (£000's p.a. /1000 aged 65 +)
Residential	92	31.2	÷ 1.08	+ (3.0)	- =	25.9 x	2.88	= 75
Intensive community care package as alternative to hospital or residential care	0	0	-	-	+ (1.7) =	(1.7) x	1.40	= (2)
Home help	26	5.1	÷ 1.05	+ (0.6)	- =	4.2 x	3.91	= 17
Day care with transport	3	2.6	÷ 1.05	-	- =	2.5 x	2.07	= 5
Meals-on-wheels	8	89.0	÷ 1.05	-	- =	85.0 x	0.04	= 3
Day care without transport	2	0.9	-	-	- =	0.9 x	0.41	= 0
Lunch clubs	1	30.0	-	-	- =	30.0 x	0.03	= 1
Sheltered housing contribution	0	------	----------	----------	---N/A------	----------	----------	---- 0
	132							99 99
						Imputed sheltered housing expenditure		2
								101

A 52

Table A.9.5 - Adjusted levels of provision and expenditure - authority 'C'

Service	Actual 1980-81 net expenditure (£000's p.a. /1000 aged 65+)	Actual provision (/1000 aged 65 + (time of visit))	Adjustments Age Structure	 % pensioners living alone	 NHS long stay hospital beds	Adjusted provision (/1000 aged 65+)	Standard net unit cost (£000's p.a.)	Adjusted net expenditure (£000's p.a. /1000 aged 65 +)
Residential	38	15.4	÷ 0.97	-	-	= 15.9	x 2.88	= 46
Intensive community care package as alternative to hospital or residential care	0	0	-	-	+ (1.8)	= (1.8)	x 1.40	= (2)
Home help	55	14.9	÷ 0.98	+ 0.1	-	= 15.3	x 3.91	= 60
Day care with transport (i)	2	1.1	÷ 0.98	-	-	= 1.1	x 2.07	= 2
Meals-on-wheels	2	96.0	÷ 0.98	-	-	= 97.0	x 0.04	= 4
Day care without transport	0	0	-	-	-	= 0	x 0.41	= 0
Lunch clubs	1	18.0	-	-	-	= 18.0	x 0.03	= 1
Sheltered housing contribution	6	—	—	—	N/A	—	—	— 6
	104							117

Note:

(i) The provision used in this appendix is the 1981 actual provision and is not the same as the provision quoted in the body of the report which is the provision at the time of visiting.

Table A.9.6 - Adjusted levels of provision and expenditure - authority 'D'

Service	Actual 1980-81 net expenditure (£000's p.a. /1000 aged 65+)	Actual provision (/1000 aged 65 + (time of visit))	Adjustments: Age Structure	Adjustments: % pensioners living alone	Adjustments: NHS long stay hospital beds	Adjusted provision (/1000 aged 65+)	Standard net unit cost (£000's p.a.)	Adjusted net expenditure (£000's p.a. /1000 aged 65 +)
Residential	58	22.1	÷ 1.07	- 2.0	-	= 18.6	x 2.88	= 54
Intensive community care package as alternative to hospital or residential care	0	0	-	-	+ (3.0)	= (3.0)	x 1.40	= (4)
Home help	25	7.1	÷ 1.04	+ (0.4)	-	= 6.4	x 3.91	= 25
Day care with transport	2	2.3	÷ 1.04	-	-	= 2.2	x 2.07	= 4
Meals-on-wheels	2	43.0	÷ 1.04	-	-	= 41.0	x 0.04	= 2
Day care without transport	0	0	-	-	-	= 0	x 0.41	= 0
Lunch clubs	0	21.0	-	-	-	= 21.0	x 0.03	= 1
Sheltered housing contribution	11	------	------	------	N/A	------	------	11
Visiting wardens	2	------	------	------	N/A	------	------	2
	100							95

7. Calculate the variances due to each of the factors above

This is simply done by calculating the effects on total expenditure at standard unit costs in each authority due to each of the factors above, (using the information from tables A.9.3 - A.9.6).

Applying these calculations in the four authorities gives the following:

Table A.9.7 - Standardisation for factors affecting resources provision

	Net expenditure (£'000s)/ 1000 elderly aged 65 or over			
	'A'	'B'	'C'	'D'
Net expenditure (at average E & W net cost/unit) - table A.9.1	£150	£120	£115	£112
Expenditure subject to factors outside control of the SSD:				
- age distribution	(3)	(8)	3	(6)
- proportion living alone	(4)	(11)	1	(7)
- availability of hospital beds	(6)	(2)	(2)	(4)
Imputed sheltered housing expenditure	-	2	-	-
Adjusted net expenditure	£137	£101	£117	£ 95

A.9.4 Variances due to differences in the levels of residential provision

The expenditure due to differences in the levels of residential provision is calculated by taking the adjusted levels of provision calculated in A.9.3 and standardising the level of residential care to the national average of 17 places /1000 aged 65 and over (which lies within the reference framework given in chapter 9). The assumption is made that the variances between residential care in an authority and the national average will be replaced by or will substitute for an intensive community package similar to those discussed in chapter 6.

The result of this adjustment is as follows:

Table A.9.8 - Adjustment for level of residential provision

Authority	Service	Provision before residential adjustment (i)	Residential adjustment	Provision after residential adjustment	Adjustment to expenditure £000s/1000 (ii)
'A'	residential	21.3	-4.3	17.0	(12.4)
	intensive community	(4.2)	+4.3	0.1	6.0 (6.4)
'B'	residential	25.9	-8.9	17.0	(27.7)
	intensive community	(1.7)	+8.9	7.2	12.5 (13.2)
'C'	residential	15.9	+1.1	17.0	3.1
	intensive community	(1.8)	-1.1	(2.9)	(1.5) 1.6
'D'	residential	18.6	-1.6	17.0	(4.8)
	intensive community	(3.0)	+1.6	(1.4)	2.3 (2.5)

Notes:

(i) From tables A.9.3 - A.9.6 column 6

(ii) Using unit costs of £2,880 p.a. per residential place and £1,400 p.a. per intensive community package.

Summarising these calculations in the four authorities gives the following:

Table A.9.9 - Standardisation for levls of resource provision

	Net expenditure £'000s/ 1000 elderly aged 65 or over			
	'A'	'B'	'C'	'D'
Adjusted net expenditure (table A.9.7)	£137	£101	£117	£ 95
Residential cost variance	(6)	(13)	2	(3)
Adjusted net expenditure for national average levels of residential care	£131	£ 88	£119	£ 92

A.9.5 Analysis of total community expenditure

The rest of this appendix provides an analysis of the total expenditure on community care in each of the four authorities, using the standardised levels of total expenditure developed in the previous section. The standardised total expenditure on community care in each of the four authorities is given as follows:

Table A.9.10 - Standardised levels of total community expenditure

	Net expenditure £'000s/ 1000 elderly aged 65 or over			
	'A'	'B'	'C'	'D'
Adjusted net expenditure for national average levels of residential care (Table A.9.9)	£131	£ 88	£119	£ 92
Less: expenditure on providing national average levels of residential care	49	49	49	49
Total adjusted net expenditure on community care	£ 82	£ 39	£ 70	£ 43

From the argument in chapter 14, the standardised least observed total expenditure on community care is just about sufficient to provide a level of care to ensure the survival of the elderly in the HPSD group and thus this level of expenditure is a useful marker for separating expenditure in each authority into two parts. The first part comprises additional expenditure on services such that the value provided by these services is worthwhile irrespective of cost. The second part comprises additional expenditure whose worthwhileness depends on local judgement concerning the value of additional services provided compared to the additional cost.

This section analyses the breakdown of total standardised expenditure on community care in each of the authorities studied to provide estimates for the lower limits for the levels of the additional expenditure (defined above). The analysis is conducted separately for the LPSD and HPSD groups using data available on the allocation of services between the two groups in the four authorities. The method used for both LPSD and HPSD groups is to:

(i) obtain a maximum estimate for the expenditure on the group in the authority which incures least expenditure on the group, and then

ii) compare it with a minimum estimate for the expenditure on the group in the other three authorities to obtain a lower limit for the difference.

The analysis is performed as follows:

Step number Calculation

1. Document the adjusted provision of services in each authority.

2. Calculate a minimum estimate for the adjusted expenditure on services to the LPSD group in each authority assuming that:

- all day care without transport and lunch clubs are allocated to this group
- home help is allocated to the group according to the results of the home help survey.

3. Calculate a minimum estimate for the adjusted expenditure on services to the HPSD group in each authority assuming that:

- all residential care, intensive community care and day care with transport are allocated to this group
- home help is allocated to the group according to the results of the home help survey.
- for authorities 'B' and 'D' it is assumed that all sheltered housing is allocated to this group; this assumption derives from the argument in chapter 14 that the sheltered housing is required for this group in order to obtain a level of service which is sufficient to avoid disasters.

Calculate the remaining adjusted expenditure on other services provided to the elderly in each authority, i.e. the adjusted expenditure on meals-on-wheels, sheltered housing (in the case of authorities 'A' and 'C') and visiting wardens.

. Add the expenditure calculated in steps 2 and 4 in each authority to arrive at a maximum estimate for the expenditure on the LPSD group. This maximum estimate in authority 'B' is less than the minimum estimate for the expenditure on the LPSD group in authorities 'A' 'C' and 'D' calculated in step 2. Therefore authority 'B' incurs less expenditure on this group than any of the other three authorities.

6. Add the expenditure calculated in steps 3 and 4 in each authority to arrive at a maximum estimate for the expenditure on the HPSD group. This maximum estimate in authority 'D' is less than the minimum estimate for the expenditure on this group in authorities 'A' 'B' and 'C' calculated in step 3. Therefore authority 'D' incurs less expenditure on this group than any of the other three authorities.

1. Analysis of community expenditure - LPSD group

From the introduction to this section, the expenditure on services provided to the LPSD group by authority 'B' is less than that of the other four authorities. An upper limit for the provision of services on the LPSD group in authority 'B' can be derived using the following assumptions:

- home help is allocated between the HPSD and LPSD groups as in the home help survey
- all day care without transport, meals-on-wheels, lunch club places and sheltered housing are allocated to the LPSD group.

The provision of services to the LPSD group in authority 'B' is then at most:

Table A.9.11 - Upper limit for authority 'B's provision of services to LPSD group

Service	Adjusted provision	% to LPSD	Adjusted provision to LPSD	Standard net unit cost	Adjusted net expenditure to LPSD
Home help	4.2	x 51%	= 2.1	x 3.91	= 8.3
Day care (without transport)	0.9	x 100%	= 0.9	x 0.41	= 0.4
Meals-on-Wheels	89.0	x 100%	= 89.0	x 0.04	= 3.4
Lunch clubs	30.0	x 100%	= 30.0	x 0.03	= 0.9
					13.0

A lower limit for the provision of services to the LPSD group in authorities 'A', 'C' and 'D' is given by the following assumptions:

- home help is allocated according to the home help survey
- all day care without transport and lunch clubs are allocated to the LPSD group
- none of meals-on-wheels and sheltered housing are allocated to the LPSD group.

In the comparison of expenditure on the LPSD group between authorities, allowance has also to be given to the assumption that, in authority 'B', support from the private sector may reduce the requirement for local authority support; that this is a valid assumption is based on the particular socio-economic factors in the authority and the observed differences in the levels of home help /1000 elderly between areas within the authority. Data available on the levels of home help provided by area suggests that the number of FTE home helps /1000 elderly in one area (which appears to have socio-economic characteristics closer to those of other authorities than the other areas) is approximately 50% higher than for the authority as a whole. It is assumed that the other areas would have required this level of home help if the support from the private sector was not present and this implies an additional provision of home help of approximately 50% of authority 'B's home help provision is necessarily provided by authorities 'A', 'C' and 'D'. In order not to under-estimate the effect of the private sector it has been assumed that authorities 'A', 'C' and 'D' necessarily incur additional expenditure on home help and meals-on-wheels to the LPSD group relative to authority 'B' of an amount equivalent to 50% of authority 'B's expenditure on home help and meals-on-wheels to this group, i.e. 50% of (8.3 plus 3.4) equals 5.9.

Using these assumptions to calculate a minimum estimate for the expenditure on the LPSD group in authorities 'A', 'C' and 'D' and comparing this with the maximum estimate for expenditure on the LPSD group in authority 'B' (after allowing for an additional requirement for home help and meals-on-wheels in these three authorities) gives a lower limit for the level of additional expenditure to the LPSD group in the three authorities. This expenditure is made up from expenditure on home helps and day care as follows: the three authorities 'A','C' and 'D' all provide greater coverage by home help to this group than authority 'B' (compensated to only a small extent by differences between authorities in average hours per client); authorities 'C' and 'D' incur approximately equivalent expenditure, and authority 'A' much more expenditure than the little authority 'B' spends on providing day care without transport and lunch clubs to this group. The appropriate calculations are shown in table A.9.12.

Table A.9.12 - Analysis of community expenditure - LPSD group

Authority	Service	Adjusted provision(i)	% to LPSD	Adjusted provision to LPSD	Standard net unit costs	Community expenditure to LPSD group (min)	Less 'B's community expenditure to LPSD (max)(ii)	Additional expenditure to LPSD group group (max)	Total expenditure on community care(iii)	Minimum % total expenditure on community care which is additional
'A'	Home help	11.0	x 47%	= 5.2	x 3.91	= 20.0				
	Day care (without transport)	25.0	x 100%	= 25.0	x 0.41	= 10.3				
	Lunch clubs	276.0	x 100%	= 267.0	x 0.03	= 8.3				
						38.6	- 18.9 =	19.7 ÷	82 =	24%
'C'	Home help	15.3	x 50%	= 7.7	x 3.91	= 29.6				
	Lunch clubs	18.0	x 100%	= 18.0	x 0.03	= 0.5				
						30.1	- 18.9 =	11.2 ÷	70 =	16%
'D'	Home help	6.4	x 93%	= 5.9	x 3.91	= 23.3				
	Lunch clubs	21.0	x 100%	= 21.0	x 0.03	= 0.6				
						23.9	- 18.9 =	5.0 ÷	43 =	12%

Notes:

(i) From tables A.9.3 - A.9.6 column 6

(ii) Authority 'B's community expenditure on LPSD group (max), from table A.9.11, plus estimated 50% additional requirement for home help and meals-on-wheels

(iii) From tables A.9.10.

2. Analysis of community expenditure - HPSD group

From the introduction to this section, the total service provided to the HPSD group by authority 'D' costs the least of the four authorities.

An upper limit for the provision of community services to the HPSD group in authority 'D' is derived using the following assumptions:

- home help is allocated between the HPSD and LPSD groups as in the home help survey
- all day care with transport, intensive community care, meals-on-wheels, sheltered housing and visiting wardens are allocated to the HPSD group.

The provision of services to the HPSD group in authority 'D' is then at most:

Table A.9.13 - Upper limit for authority 'D's provision of community services to HSPD group

Service	Adjusted provision (i)	% to HPSD	Adjusted provision to HPSD	Standard net unit cost	Adjusted net expenditure to HPSD
					(£000/1000)
Home help	6.4	x 7% (ii)	= 0.5	x 3.91	= 1.6
Day care (with transport)	2.2	x 100%	= 2.2	x 2.07	= 4.5
Intensive community care	(1.4)	x 100%	= (1.4)	x 1.40	= (1.9)
Meals-on-wheels	41.0	x 100%	= 41.0	x 0.04	= 1.6
Sheltered housing	----------	----------	N/A ----------	----------	11.0
Visiting wardens	----------	----------	N/A ----------	----------	2.2
					19.0

Notes:

(i) From table A.9.6 column 6 and table A.9.8 column 4 (int. community care).

(ii) From table A.6.6 (d), 84% of home help is allocated to the LPSD group in authority 'D', i.e. 84% of 7.1 FTEs. Therefore % of adjusted provision to HPSD group is given by: $100\% - (84\% \times \frac{7.1}{6.4}) = 7\%$

A lower limit for the provision of community services to the HPSD group in authorities 'A', 'B' and 'C' is given by the following assumptions:

- home help is allocated according to the home help survey
- all day care with transport and intensive community care are allocated to the HPSD group
- none of meals-on-wheels, lunch clubs, day care without transport or sheltered housing are allocated to the HPSD group (with the exception of authority 'B' for which it is assumed that all sheltered housing is allocated to this group, this assumption deriving from the argument that the sheltered housing is required for this group in order to obtain a level of service which is sufficient to avoid disasters).

In the comparison of expenditure on the HPSD group between authorities, allowance has also to be given to the observation in chapter 14 that the levels of service to ensure survival of the elderly in the HPSD group in authorities 'A' and 'C' may necessarily require expenditure up to about 10% more than the lowest maximum estimate in authority 'D', i.e. £2/1000.

Applying these assumptions to the provision of services in the three authorities (after allowing for the differences in the levels of residential provision, and also the additional requirement for community services in authorities 'A' and 'C') and comparing the resulting expenditure with the minimum estimate for the expenditure in authority 'D' derived above, gives a lower limit for the level of additional expenditure due to the unseparated combination of additional levels of service and/or a different mix of methods of care to the HPSD group incurred in authorities over and above the expenditure in authority 'D'. However these two types of additional expenditure cannot be identified separately because authority 'D' provides greater coverage with some services which might be going to this group than the other authorities (sheltered housing, visiting wardens) and less coverage with other services (home help). The appropriate calculations for the four authorities are shown in table A.9.14.

Table A.9.14 - Analysis of community expenditure - HPSD group

Authority	Service	Adjusted provision(i)	% to HPSD(ii)	Adjusted provision to HPSD	Standard net unit costs	Community expenditure to HPSD group (max)	Less 'D's community expenditure to HPSD group (max)	Additional community expenditure to HPSD group (max)	Total expenditure on community care(iii)	Minimum % total expenditure on community care which is additional
'A'	Home help	11.0	x 53%	= 5.8	x 3.91	= 22.8				
	Day care (with transport)	3.8	x 100%	= 3.8	x 2.07	= 7.8				
	Intensive community	0.1	x 100%	= 0.1	x 1.40	= 0.2				
						30.8	- 20.9(iv)	= 9.9	÷ 82	= 12%
'B'	Home help	4.2	x 49%	= 2.1	x 3.91	= 8.2				
	Day care (with transport)	2.5	x 100%	= 2.5	x 2.07	= 5.1				
	Intensive community	(7.2)	x 100%	= (7.2)	x 1.40	= 10.1				
	Sheltered housing			N/A		2.6				
						26.0	- 19.0(v)	= 7.0	÷ 39	= 18%
'C'	Home help	15.3	x 50%	= 7.7	x 3.91	= 30.8				
	Day care (with transport)	1.1	x 100%	= 1.1	x 2.07	= 2.3				
	Intensive community	(2.9)	x 100%	= (2.9)	x 1.40	= (4.0)				
						29.1	- 20.9(iv)	= 8.2	÷ 70	= 12%

Notes:

(i) From tables A.9.3 - A.9.6 column 6 and Table A.9.8 column 4.

(ii) % of home help calculated as in note (ii), table A.9.13.

(iii) From table A.9.10.

(iv) Authority 'D's community expenditure on HPSD group (max) plus estimated additional requirement for community services.

3. Analysis of remaining expenditure

The remaining expenditure in each authority is calculated as follows:

remaining expenditure = total adjusted net expenditure in authority

- upper limit of authority 'D's expenditure to HPSD group
- upper limit of authority 'B's expenditure to LPSD group
- lower limit of additional expenditure to HPSD group
- lower limit of additional expenditure to LPSD group.

The appropriate calculations for the four authorities are shown in table A.9.15.

Table A.9.15 - Analysis of other additional expenditure

Authority	Adjusted expenditure (i)	Adjustment to expenditure for differences in residential provision (i)	Less expenditure on providing 17/1000 residential places	Less 'D's community expenditure to HPSD group (max) (ii)	Less additional community expenditure to HPSD group (min) (iii)	Less 'B's expenditure to LPSD group (max)(iv)	Less additional expenditure to LPSD group (min)(v)	Other remaining expenditure	Total expenditure on community care	% total expenditure on community care which is unseparated
'A'	137 –	6	– 49	– 21 –	10	– 19	– 20	= 12	÷ 82	= 14%
'B'	101 –	13	– 49	– 19 –	7	– 13	– 0	= 0		
'C'	117 +	2	– 49	– 21 –	8	– 19	– 12	= 10	÷ 70	= 14%
'D'	95 –	3	– 49	– 19 –	0	– 19	– 5	= 0		

Notes:

(i) Tables A.9.3 - A.9.6, column 8

(ii) Table A.9.14, column 6

(iii) Table A.9.14, column 7

(iv) Table A.9.12, column 6

(v) Table A.9.12, column 7

Summarising the calculations in this section for the four authorities gives the following:

Table A.9.16 - Analysis of community expenditure at standard costs, standard demography and national average levels of residential care

	Net expenditure £'000s/ 1000 elderly aged 65 or over			
	'A'	'B'	'C'	'D'
Minimum observed expenditure to LPSD group:				
- Least observed (authority 'B')	£ 13	£ 13	£ 13	£ 13
- Additional requirement for services to replace private services	6	-	6	6
Minimum observed expenditure to HPSD group:				
- Least observed (authority 'D')	19	19	19	19
- Additional requirement for services to replace mobilised support	2	-	2	-
Additional expenditure-				
- LPSD group	20	-	12	5
- HPSD group	10	7	8	-
- either LPSD or HPSD group	12	-	10	-
Total adjusted net expenditure on community care (table A.9.10)	£ 82	£ 39	£ 70	£ 43

METHOD OF COMPARISON OF AN AUTHORITY'S PROVISION OF RESIDENTIAL ACCOMMODATION WITH THE REFERENCE FRAMEWORK ESTIMATE CONSISTENT WITH VALUE FOR MONEY

Nationally SSD net expenditure on residential accommodation forms the largest part of total SSD net expenditure on the elderly.

It is important, therefore, that an authority should consider its provision of residential places in the context of the reference framework estimate of 17-21 places/1000 elderly aged 65 or over developed in chapter 9 as being consistent with providing value for money.

At a first cut, the comparison can be made ignoring the actual availability of long-stay hospital beds. However, the reference framework estimate for residential places consistent with value for money has been computed under the assumption of the constant prevalence in authorities of different groups of the elderly - specifically the proportion of the elderly aged 75 or over and the proportion of pensioners living alone. The constant prevalence assumed in the development of the framework for each of these factors is the latest available national average. Authorities for which the proportion of the elderly aged 75 or over, or the proportion of pensioners living alone are above the national average would be expected to require additional residential places to accommodate the above average numbers of highly dependent elderly. For comparison of an authority's residential provision with the reference framework estimate, it is therefore necessary to remove the effects of differences from the national average in these factors.

The adjustment factors required are computed using the following formulae:

i) Adjustment factor for the proportion of elderly aged 75 or over

From table A.2.11

$$A = \frac{(\text{\% elderly aged 75 or over} \times 37.37) + (\text{\% elderly aged 65-74} \times 4.64)}{17.0}$$

where relevant % elderly are expressed as decimals (i.e. 30% = 0.30)

ii) Adjustment factor for the proportion of elderly living alone

From section A.2.5

$$B = \frac{(0.71 \times \text{\% living alone}) + 29}{46}$$

where % living alone is expressed in whole numbers (i.e. 30% = 30.0)

The application of this factor is, however, only necessary where, in the context of the reference framework, the provision of residential care is considered appropriate for sub-groups of the elderly purely on the basis of a lack of support from friends and relatives - sub-groups 6 and 8 (i.e. where for sub-groups with equivalent characteristics, except for their availability of suport - sub-groups 7 and 9 - care within the community has been considered appropriate).

Thus, on the basis of the reference framework estimates presented in table 9.1, this factor is only applied to the population estimate of 14½/1000 in sub-groups 6 and 8.

An authority's residential provision, adjusted for differences from the national average in the proportions of elderly people aged 75 or over, or living alone, for comparison with the reference framework estimate of 17-21 places/1000 elderly is calculated as follows:-

$$\text{Adj. provision/1000} = \left[\left(\frac{\text{res. places provided x 1000}}{\text{population aged 65 or over}} \div A\right) - 14\tfrac{1}{2}\right] + \left(14\tfrac{1}{2} \div B\right)$$

If the result of this calculation is:-

i) less than 17, then the authority appears, in the absence of other circumstances, to be providing less residential places than suggested by the reference framework as being consistent with providing value for money

ii) more than 21, then the authority appears, in the absence of other circumstances, to be providing more residential places than suggested by the reference framework as being consistent with providing value for money

iii) between 17 and 21, then the authority appears, in the absence of other circumstances, to be providing residential places at a level consistent with providing value for money.

Note:

In performing the above comparison it must be remembered that the provision of residential places at a *level* consistent with providing value for money in the context of the framework estimate will nevertheless be inconsistent with providing value for money if the *allocation* of the places provided is inconsistent with the framework.

As a second cut, the comparison should account for the actual availability of long-stay hospital beds. This is, however, more difficult since the data required is not readily available. Whilst the data was found specifically in the case of authorities 'A', 'B', 'C' and 'D', a general method for its collection and analysis has not been devised.

REFERENCES

1. "Report of a Study on Community Care", published by DHSS (1981), ISBN 0-902650-35-1.

2. A.H. Maslow "A Theory of Human Motivation" published in "Psychological Review", vol. 50 (1943) pp. 370-96.

3. "The Hospitals and Health Services Year Book, 1981" published by the Institute of Health Service Administrators.

4. "Balance of Care"

   i) P.D. Klemperer, J.W. McClenahan "Joint Strategic Planning Between Health and Local Authorities" published in "Omega - The International Journal of Management Science", no. 5 (1981) pp 481-491.

   ii) R.G. Borley, S.H. Taylor, C.R. West, "Balance of Care - a User's View of a New Approach to Joint Strategic Planning" published in "Omega" (as (i) above) pp 493-499

   iii) "A User's Guide to the Balance of Care Report", published by DHSS (1981)

   iv) "Balance of Care Project for the Elderly - Area Survey Report", by S.H. Taylor (1982)

5. Audrey Hunt, "The Elderly at Home", a survey carried out on behalf of the DHSS, published by HMSO (1978), ISBN 0 11 700823 0.

6. N.Howell, D. Boldy, B. Smith "Allocating the Home Help Services" published by Bedford Square Press of the National Council of Social Services (1979), ISBN 0 7199 1026 9

7. "Health Service Costing Returns, Year ended 31st March 1979", published by HMSO, ISBN 0 11 320763 8

8. "Care in Action, A Handbook of Policies and Priorities for the Health and Personal Social Services in England", published by HMSO, ISBN 0 11 320755 7

9. "The Way Forward, Priorities in the Health and Social Services", published by HMSO, ISBN 0 11 320676 3

Printed in England for Her Majesty's Stationery Office
by Robendene Ltd., Amersham
Dd 736345 C15 7/83